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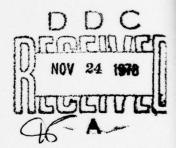
U.S. AIR FORCE TURBINE ENGINE EMISSION SURVEY VOL III ENGINE MODEL SUMMARIES

ANTHONY F. SOUZA SCOTT ENVIRONMENTAL TECHNOLOGY, INC. PLUMSTEADVILLE, PENNSYLVANIA 18949



PETER S. DALEY
ENVIRONMENTAL ASSESSMENT RESEARCH DIVISION
DIRECTORATE OF ENVIRONICS

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FINAL REPORT FOR PERIOD JANUARY 1975-JUNE 1978

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CIVIL AND ENVIRONMENTAL ENGINEERING DEVELOPMENT OFFICE

(AIR FORCE SYSTEMS COMMAND)
TYNDALL AIR FORCE BASE
FLORIDA 32403

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17. DISTRIBUTION STATEMENT (** 18. SUPPLEMENTARY NOTES Available in DDC 19. KEY WORDS (Continue on reverse Gas Turbine Engines Exhaust Emissions Air Pollution 10. ABSTRACT (Continue on reverse at various power leverse smoke number was determobile Emissions Laboratory)	e side if necessary and identify by block number Smoke Oxides Particulates Aftern Carbon Monoxide Total Hydrocarbons side if necessary and identify by block number, missions from 14 military gas 1s from idle to full power in	om Report) of Nitrogen ourner Emissions sturbine engines were meas scluding afterburning. SAI re made using the Air Force

oxides was estimated from fuel analyses.

SECURITY CLASSIFICATION OF THIS PAGE(When Date Entered)

Continued from Block 20.

The body of data was analyzed to show relationships among the data. These studies included the effect of power setting on emission index and smoke number, variation of gas concentrations across the exhaust plume and the degree of uncertainty introduced by abbreviated sampling methods. A summary table of "Best Estimate" emission factors for all the engines tested is provided.



PREFACE

This report was prepared by Scott Environmental Technology, Inc. under Air Force Contract Number F29601-75-C-0046. The work reported herein was administered under the direction of the Environics Directorate of the Air Force Civil and Environmental Engineering Development Office (Det 1 ADTC) with Major Peter S. Daley serving as Project Officer. Work was performed from January 1975 through June 1977. The engine test program was performed with the cooperation of the following Air Force organizations and private engine overhaulers; their excellent cooperation is gratefully acknowledged.

Teledyne; Nesho MO

First Composite Wing; Andrews AFB MD

Air Force Logistics Command; Kelly AFB TX

Air Force Logistics Command; Tinker AFB OK

Air Force Tactical Air Command Headquarters; Langley AFB VA

General Electric Company; Lynn MA

This report is presented in three volumes. Volume I is an overall description of the work performed and the results obtained. A table of best estimate emission factors for Air Force gas turbine engines is presented in Volume I. Volume II contains the results of the individual tests of each engine. Volume III contains the Model Summaries which are statistical summaries of the test results by engine model.

PETER S. DALEY, Major QUSAF, BSC

Project Officer

PETER A. CROWLEY, Major, USAR BSC

Director of Environics

PIZZUTO, Col, USAF, BSC JOSEPH S

Commander

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APPENDIX C

MODEL SUMMARIES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TUREINE ENGINE EMISSIONS INVENTORY
ENGINE MODEL SUMPARY REPORT

SET 1492-004-1275

REPORT DATE C2/11/77 USAF CONTRACT F29601-75-C-0346

ENGINE MODEL : J69-125

TEST LOCATION : TELEDYNE , NEO

**** CAIEGORY A TESTS ONLY ****

ENGINE 1, PAGE I

EXHAUST MASS EMISSION INDICES :

NO. MAX OBS VALUE			1 0.57 0.57	1 29.6 29.6		2 52	1 37.3 37.3		6.0	0	1.75	1 3.93 3.93	1 0.01 0.01			1 2.23 2.33		0.32 0.32		1.04	1 1.69 1.69	1 0 44		0
MEAN SIND & COEF																								
VAL UE	15.98		3.53	134.54		52.64	14.24	1.52			2.63	3.60	90.0		1.06	2.05				1.56	1.55			
VALUE	15.98	1.35	0.53	134.54		52.64	34.24	1.52			2.61	3.60	00.0		1.00	2.05	1.46			1.56	1.55			
035 035	- 0	0 4	-	-	ם ה	-	-	-	0	0	- .		1	ם ר	, -	-		0	0	-	-	C	0 0	,

~2

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-004-1275

REPORT DATE 02/11/77
USAF CONTRACT F29601-75-C-0946

ENGINE MODEL : J69-725

ENGINE 1, PAGE 2

**** CATEGORY A TESTS ONLY ****

TEST LOCATION : TELEDYNE, NEO

MEASURED FUEL FLOW & SMOKE NUMBER :

•	2 COEF						
	STND	DEV					
NUMBER	MEAN	-					
- SMOKE	NIT	1	12.56	-		1.67	3.24
* SMOKE NUMBER	MAX	1	12.56	-		1.67	3.24
•	0 0 0		-		0	1	
•	2 COEF						
* MEAS. FUEL FLOW - #/HR	STND						
FLOW -	HEAN						
IS. FUEL	VALUE	-	220			670	1090
/3H	VALUE		220			670	1096
	NO.			0	0	-	-
	TEST MODE		IDLE	INTERMED. 1	INTERMED. 2	NORMAL	MILITARY

3

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TUPBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE 403EL : J69-725

SET 1492-004-1275

REPORT DATE C2/11/77 USAF CONTRACT F29601-75-C-0046

TEST LOCATION : TELEDYNE, NEO

ENGINE 1. PAGE 1

**** CATEGORY 3 TESTS ONLY ****

		*		101 / # -	# / 1003# FUEL	1	*******				THE NAME OF		
*****	1651 MODE	.00 088	VALUE	MIN	KEAN	STND	* COEF	o s o o	MAX	MIN	HEAN	STNO	2 COEF
	3 101		26. 67	48.4	10.86	10.421	52.48	101	8-18	1.51	4.62	2.437	52.7
,	TATEDAED. 1		12.18	7.57	16.6	3.401	34-10	2	3.59	2.16	2.87	1.011	35.17
		10	5.95	2.21	4.08	2.645	64.82	2	3.09	1.16	2.13	1.351	63.2
		10	1.87	0.59	1.29	164.0	38.60	10	1.23	0.45	0.89	0.316	35.6
	MILITARY	10	0.75	0.24	0.49	0.156	31.50	10	0.79	0.26	0.54	0.165	30.5
0.0	101 F	10	161.45	163.83	126.44	21.972	17.38	10	37.9	23.9	29.3	5.25	1.79
3	0 46 0	2	98.61	97.10	97.85	1.568	1.09	2	28.6	27.7	28.5	19.0	0.2
	INTERMED		64.11	56.40	60.25	5.452	9.05	2	34.3	29.3	31.6	3.54	1.1
		10	56.27	36.50	48.72	5.655	11.61	10	37.7	30.3	33.6	2.55	0.7
	HILITARY	10	33.39	28.25	31.02	1.601	5.16	10	36.8	30.6	34.0	1.92	0.5
X OX	101.6	٥	1.80	1.27	1.53	0.186	12.10	٥	0.41	0.29	0.36	0.042	11.86
	SAED.	2	2.12	1.98	2.05	660.0	4.83	2	09.0	0.58	0.59	0.014	2.4
	TATER AFD.	2	2.79	2.55	2.67	0.170	6.36	2	1.45	1.37	1.41	0.057	0.4
		•	3.31	1.67	2.68	0.534	19.96	0	2.82	1.10	1.91	0.566	59.6
	MIL ITANY	•	4.15	2.65	3.60	0.520	14.47	0	4.50	2.86	3.95	0.561	14.1
9.	3101	10	1.81	0.04	0.41	0.578	139.70	10	0.42	0.01	0.10	0.134	139.69
	RMED.	2	0.22	0.14	0.18	0.057	31.43	2	90.0	40.0	90.0	0.014	28.2
	INTERACO. 2	2	1.12	36.0	1.04	0.113	10.88	2	0.58	0.51	0.54	0.049	0.6
		13	2.91	1.01	1.67	0.555	34.10	10	1.92	0.01	1.15	0.412	35.9
	*11.17AHY	10	3.81	2.15	2.53	594.0	17.84	10	50° 5	2.34	2.87	0.485	16.8
AC2	3701	6	1.70	0.39	1.27	0.431	33.84	5	0.39	0.00	0.30	0.100	33.88
	INTERNED.	2	1.95	1.85	1.87	0.035	1.89	2	0.54	0.54	0.54	0.000	0.0
		2	1.68	1.59	1.63	990.0	3.89	2	0.87	3.85	0.80	0.014	1.6
		•	1.64	0.41	1.19	0.478	40.12	•	1.35	0.28	0.85	0.380	***
	WIL ITANY	5	1.57	0.31	1.10	255-0	50.19	,	1.76	0.35	1.21	0.603	50.01
× 0.8	TOPE	0						10	0.48	0.18	0.33	0-140	41.6
	AME D.	0						2	0.58	0.57	0.57	0.007	1.2
	INTERMED. 2	D						2	1.07	1.04	1.05	0.021	2.01
	SURMAL	0						10	1.74	0.53	1.03	0.492	47.7
	ALL ITABY	0						0.	2.24	XX	1	244	

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-5046

ENGINE MODEL : J69-T25

FEST LOCATION : TELEDYNE, NEG

SET 1492-004-1275

ENGINE 1, PAGE 2

**** CATEBORY B TESTS ONLY ****

MEASURED FUEL FLOW & SMOKE NUMBER :

	*	MEAS	AS. FUEL	F104 -	#/HR	*	*		- SMOKE	NUMBER		
TEST MODE	, 0v	X A M		MEAN	STAD	~	NO.	AAX	2	MEAN	STAD	2 COFF
	0.85	VALUE	VALUE		DE V	VAN	088	VALUE	VALUE		0.50	× ×
			i	1 1 1 1 1	1		****			1		
10LE	10	240		232	5.9		10	48.05	24.45	39.40	8.213	20.45
INTERMED. 1	2	290		288	3.5		2	37.56	34-16	35.86	2-404	6.30
INTERMED. 2	2	535		528	10.6		2	5.34	0.00	2.67	3.776	141.42
NORMAL	1.0	919		701	80.4		10	7.97	00.00	2.02	2.505	124.19
MILITARY	10	1120		1096	20.3		10	11.20	0.00	2.67	3.591	134.34

- 5

SCOTT FAVISONMENTAL TECHNOLOGY INC. USAF TURKINE ENSINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J69-125

TEST LOCATION : TELEDYNE, NEO

SET 1492-004-1275

ENGINE 1, PAGE 1

*** CATEGORY C TESTS ONLY ****

EXHAUST MASS EMISSION INDICES :

The control of the		EST MODE	0.85	VALUE	VALUE	Z E P Z	STAD	* COEF VAR	NO.	MAX	MIN	MEAN	STND	* COEF
INTERRED. 1	THC	3701	1	6.91	6.91				:					
NUTCHED. 2 NUTCHED. 2 NUTCHED. 2 NUTCHED. 3 NUTCHED. 1 NUTCHED. 1 NUTCHED. 1 NUTCHED. 1 NUTCHED. 2 NUTCHED. 1 NUTCHED. 2 NUTCHED. 2 NUTCHED. 3 NUTCHE		INTERMED. 1	0						→ (1.52	1.52			
NORMAL 1		0	C						.					
10 10 10 10 10 10 10 10		NORMAL	1	0.50	0.50				ο.					
10 10 10 10 10 10 10 10		MILITARY	-	0.48	0.48					0.52	0.33			
INTERRED. 1 114-49 114-49 1 1 25.2 INTERRED. 1 0 114-49 1 14-49 1 1 25.2 INTERRED. 1 0 0 1-59 1-59 1 1 30.5 INTERRED. 1 0 0 1-57 2-77 1 1 4.26 INTERRED. 1 0 0 1-13 0 1 1 4.26 INTERRED. 1 0 0 1-14 1 1-41 1 1-41 1 1-41 1 1-44 1 1-44 1 1 1-44 1 1 1-44	00	2 101												
INTERRED. 1	,		- 1	114.49	114.49				1	25.2	25.2			
IDLE			0						G					
DEC		.0.	n											
IDLE		NORMAL	1	48.31	48.31						;			
IDLE		MILITARY	-	37.74	27.74					30.5	30.5			
ED. 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	× O ×	3701	-	1.50	000									
INTERMED. 2 NORMAL N		CHE							-	0.35	0.35			
NORMAL 1 2.77 2.77 1 1.83 1 1.83 1 1.83 1 1.83 1 1.83 1 1.83 1 1.84 1 1.84 1 1.84 1 1.84 1 1.84 1 1.84 1 1.85 1 1.8			o e						0					
MILITARY 1 3-97 3-67 1 1-83 1 1-83 1 1-83 1 1-83 1 1-83 1 1-84 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-94 1 1-953 0 1 1-953				2 17					O					
10 10 10 10 10 10 10 10		2041		71.7	1 . 2				1	1.83	1.83			
IDLE INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 3 I		11111111		3 - 8 7	3.87				-	4.26	4.26			
INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 1 INTERMED. 1 INTERMED. 1 INTERMED. 1 INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 3 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 3 INTERMED. 4 INTERMED. 4 INTERMED. 5 INTERMED. 5 INTERMED. 5 INTERMED. 5 INTERMED. 6 INTERMED. 6 INTERMED. 6 INTERMED. 6 INTERMED. 7 INTER	0,	IDLE	-	21.0										
INTERMED. 2 0 0 0.93 NUMBAL MILITARY 1 2.56 2.56 IDLE IMTERMED. 1 0 1.46 INTERMED. 2 0 0 0.32 NORMAL NORMAL 1 1.35 1.35 INTERMED. 2 0 0 0.89 INTERMED. 1 0 0 1.44 INTERMED. 2 0 0 0.18					0.10				-	0.03	0.03			
NUMMAL 1.41			c						0					
MILITARY 1 2-56 2-56 1 0-93 IDLE 101E INTERMED. 1 0 0-32 NORMAL 1 1-35 1-35 NILITARY 1 1-31 1-31 1-31 INTERMED. 2 0 0 0-18 NORMAL 1 0 0 0 0 0 0-18 NORMAL 1 0 0 0 0 0 0-18 NORMAL 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		SCK 3B	-	1 7 7 1	1				0					
100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.6		MILITARY	-	73.0	2 6				-	0.93	0.93			
IDLE INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 1 INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 2 INTERMED. 3 I				20.	00.4				-	2.82	2.62			
INTERMED. 1 0 1.35 1.35 0 0 0.32 0 0 0.32 0 0 0.32 0 0 0.32 0 0 0.32 0 0 0 0.32 0 0 0 0.32 0 0 0 0.32 0 0 0 0.32 0 0 0 0.32 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.2	101.5		95	1 . 46									
INTERMED. 2 0 0 0 0.89 MILITARY 1 1.31 1.31 1.44 10.689 INTERMED. 2 0 0 0.18 NOWTHER MED. 2 0 0 0.18 MILITARY 0 0 0.53									-	0.32	0.32			
NORMAL NILITARY 1 1.35 1.35 NILITARY 1 1.31 1.31 1.34 10LE 0 1 1.44 11 0.89 11 0.89 11 0.89 11 0.89 12 0.89 13 0.89 14 0.89 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			C						0					
MILITARY 1 1.31 1.31 1.44 10LE 10LE 10LE 10LE 10LE 10LE 10LE 10L			-	1 . 3.5	1.30				0					
10.44 10.6 10.6 10.18 10.18 10.18 10.18 10.18 10.18 10.53		MILITARY		2 2 2					-	0.89	0.89			
10LE 1NTERMED. 1 0 0 1NTERMED. 2 0 0 NORMAL 0 1 0.53				10.1	1.31				-	1 . 44	77.			
0.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	×o	136	0											
0.2 0 0			0						-	0.18	0.16			
1 0.53			0						a					
0.53		NORMAL							0					
		MILITARY							-	0.53	0.53			

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TUREINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-004-1275

KEPOKT DATE 62/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL SUMMARY REPORTED

TEST LOCATION : TELEDYNE, NEO

ENGINE 1, PAGE 2

**** CATEGORY C TESTS ONLY ****

MEASURED FUEL FLOW & SMOKE NUMBER :

	*	3W	AS. FUEL	FLOM -	*/HR	# MEAS. FUEL FLOM - #/HR	*****		* SMOKE NUMBER	NUMBER		*
TEST MODE	.0v	I A A	7	NEAN	STND	* COEF	07	¥		2 4		7 6656
	0.85	VALUE	VALUE		> 30	Y V	0.85	VALUE	VALUE		DF v	200
								-				
IDLE	1	220	220				-	49.50				
INTERMED. 1	0											
INTERMED. 2	C						o c					
ORMAL	1	090	099				·	00.00	00-0			
TLITARY	1	1130	1130					0.00	0.00			

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : J85-5

REFORT DATE C2/11/77 USAF CONTRACT F29601-75-C-0046

CT F29601-75-C-004

ENGINE 2, PAGE 1

Z COEF

TEST LUCATION : TELEDYNE, NEO

SET 1492-004-1275

SORTH CATEGORY A TESTS ONLY ****

HED. 1 1172.92 172.97 1 1 13.97 1 13	PAF 1*	15.5T MODE	NO.	MAX VALUE	MINVALUE	MEAN	STAD	000	MAX	VALUE	REAN	-
INTERNED 1 31.05 31.05 1.05	-				1	1	1	 				
INTERNED. 1 INTERNED. 2 INTERNED. 2 INTERNED. 2 INTERNED. 2 INTERNED. 1 INTER	JH.	IDLE	1	31.05	31.05			٠, ٠	17.7	12.21		
NORMEL INTERMED. 2 INTERMED. 1 INTERMED. 2 INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 3 INTERMED. 1 INTERMED.			C					3				
NORMAL 3.74 3.74 3.74 3.74 3.74 3.75 1 5.27 1 10.84 0.84 0.84 1 5.27 1 10.84 0.84 0.84 1 10.85			0					0		1		
December			-	3.74	3.74			-	5.27	5.27		
Intervence		MILITARY	1	0.84	0.84			-	2.28	2.20		
IDEC 1								177		-		
INTERMED. 1 0 0 68.2 NORMERMED. 2 0 0 0 68.2 NORMERMED. 1 1.29 1.29 1.29 INTERMED. 2 0 0 0.17 NORMERMED. 1 1.29 1.29 INTERMED. 2 0 0 0.17 INTERMED. 1 0.17 0.17 INTERMED. 1 0.18 1.51 INTERMED. 1 0.56 IN	0	1016	-	172.93	172.93			-	8.11	0.11		
INTERMED. 2 0 41.30 1.29 1.29 1.29 1.29 1.29 1.29 1.29 1.29			C					3				
Total Company			0					0				
IDLE			-	41.30	41.30			-	58.5	58.2		
10 10 10 10 10 10 10 10		>0411111		24.07	28.07			1	76.3	76.3		
INTERMED. 1 1.29 1.29 1.29 1.29 1.29 1.29 1.29 1		1441171										
INTERMED. 1 0 2.35 2.35 1 3.32 1 1 3.32 2.35 2.35 2.35 2.35 2.35 2.35 2.35	x 0	1916	-	1.29	1.29			-	0.58	0.58		
INTERMED. 2 0 2.35 2.35 1 3.32 1 10.88 10.		0 340	0					0				
10 2.35 2.35 1 3.32 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 1 3.32 3.32 1 3.32 3.3			C					Ö				
10 10 10 10 10 10 10 10				2. 25	27.26			~	3.32	3.32		
OLE O.17 O.17 O.08 O		725.00							9 8 9	4.45		
IOLE INTERMED. 1 0.17 0.17 INTERMED. 2 0 0.66 INTERMED. 1 0.68 0.66 INTERMED. 1 1.51 1.51 INTERMED. 1 0.50 INTERMED. 2 0 0 0.36 INTERMED. 3 0 0.36 INTERMED. 3 0 0		TITI DES	~	55.2	5.00							
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10.00 10.0			, -					()				
1.12 1.51				44.	0.68			1	96.0	96.0		
IDLE INTERMED. 1		HILITARY		1.51	1.51			4	4.12	4.12		
IDLE INTERRED. 1 0.50 INTERRED. 2 0 0 2.36 INTERRED. 1 0.02 INTERRED. 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												
INTERMED. 1 0 0 2.36	200	3761	1	1.12	1.12			7	0.50	0.50		
INTERNED. 2 3 1.67 1.67 1.67 1 2.36 1 2.36 1 1 1.02 1 1 2.36 1 1 1.02 1 1 2.36 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		MED.	C					0				
1 2.36 NONMAL LITTARY LITTARY 1 1.67 1.67 1 2.36 1 2.77 1 0.36 INTERMED. 1 0 INTERMED. 2 0 NONMAL			C					0				
IDLE 102 1.02 1.02 1.02 1.02 1.02 1.036 1.				1.67	1.67			1	2.36	2.36		
100.5 1 0 100.5 1 0 0 100.5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		200		1.02	1.02			-	2.11	2.77		
1068 INTERMED. 1 0 0 INTERMED. 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-11114	,	0.1	30.							
INTERMED. 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	X O	101.5	0					1	0.36	0.36		
0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0 37	0					0				
1 1113			3 0					C				
			2						1 1 2	1.13		
										1		

8

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENSINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-604-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J85-5

ENGINE 2, PASE 2

**** CATEGORY A TESTS ONLY ****

TEST LOCATION : TELEDYNE, NEO

MEASURED FUEL FLOW & SMOKE NUMBER :

	00 %
	STRD
NUMBER	Z
- SMONE	AIN D.OO
****** SMONE NUMBER	14 14 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	· N - 0 0
* MEAS. FUEL FLOM - #/HR	W COEF
7HK	STND
FLOW -	A A
S. FUEL	WALUE VALUE 450 1410 2720
MEA	450 1410 2720
	0.889.
	TEST MODE LIDLE INTERMED. 1 INTERMED. 2 NORMAL MILITARY

9

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY

561 1492-004-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0346

EXHAUST MASS PARAW TEST THE INTER INTER NORMA NO	EMISS CHISS CHISS CHISS CHISS CHISS CHISS CHISS CHISS CHISS CHIS CHI	ND I CE S	#AX VALUE 49.48 704.56 7.04 5.35 1.27 0.12 0.12 5.71 5.71 5.71 5.71 5.71	# / 1001 #IN VALUE 23-53 18-82	*	TEST LOCATION	ON : TELEDYNE TESTS ONLY	NE "NEC				ENGINE	2. PAGE
EXHADS T	TEST MODE TEST MODE INTERMED. 1 INTERMED. 2 MORMAL MAX AB MAX AB MAX AB MAX AB	ND I CE S NO	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	A N N N N N N N N N N N N N N N N N N N	*	>	STS ONL	*					
18 A A A A A A A A A A A A A A A A A A A	TEST MODE TEST MODE INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 1 INTERMED. 2 INTERMED. 1 INTERMED. 2 INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 3 INTERMED. 4 INTERMED. 3 INTERMED.	MDICES ************************************	77. 77. 77. 77. 77. 77. 77. 77. 77. 77.	ALUA B.S.	*	>	SIS ONE	4					
THAN BANK THE	TEST MODE TEST MODE INTERMED. 1 INTERMED. 2 MILITARY HAX AB INTERMED. 1 INTERMED. 1 INTERMED. 1 INTERMED. 1 INTERMED. 2 NORMAL MAX AB MAX AB	MDICES MASSING SS.	7. 7. 7. 7. 50. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	ALU ALU AS S S S S S S S S S S S S S S S S S S									
# 10 00 00 x	A B B B B B B B B B B B B B B B B B B B	S S S S S S S S S S S S S S S S S S S	7 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ALUALU 3.5	- 1								
4 1 0 x	A B B B B B B B B B B B B B B B B B B B	OS O O O O O O O O O O O O O O O O O O	4 A L L L L L L L L L L L L L L L L L L	A I A I	CON FUEL	-	*	*		-	/ HR		
E 8 X	A PARED TARRED T	S O O O O O O O O O O O O O O O O O O O	VAL. 20. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	A	MEAN	STAD	2 COEF	0	×	7	2 4 3 4	CTAD	
9 ×9	ATAR ANED.	**************************************	4.9. 77. 77. 10. 10. 13.3. 4.8.	m &		DE v	VAR	085	VALUE	VALUE		20.0	-
×	RAKED.	NUSSE BUNSSE	20.7.7.	. 60	20 78	1 2 1 0	27 10	1 0	1 1			1	
×	A PARED.	noom onnoor	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			1.230	6.25	•	22.27	10.59	13.49	9	
×	A B B B B B B B B B B B B B B B B B B B	ээм оппоон	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		5.8	1.704	29.21	2	3.16	5.23	4 4		0 0
×	A A A A A A A A A A A A A A A A A A A	*** ***********	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.53	3.33	1.221	36.62		7.87	2.09	4.93	1.896	38.0
×	A MED.	~ •~~•	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	77.0	0.84	0.269	31.96	0	3.35	1.11	2.20	~	1
×	AAL	• ~ ~ ~ ~ ~	5 5 6	0.01	0.07	0.057	17.54	٤	1.01	0.10	0.61	3	76.44
×	AAF GO.	N N O O N	56.		e e	16.	60.9	•		74.6	7 18	20	
×	A PA FO.	NOOM	9 80 %	3	:	.02	1.54	2		76.5	4.5	1 20	•
×	B B B	0 0 N	8 M	53.57	55.14	2.220	4.03	2	65.8	60.5	63.2	37.75	
×	× 0	o ~			N	.76	6.35	•		56.4	0. 49	7	
×	n 7	~	•		6	.25	7.66	٥		68.6	77.3	7.31	
×	0 4	5	-		. 9	. 93	7.41	*		198.1	216.7	16.24	0.7
		ø	1.39	-	1.26	0		9	0.62		4	900	
		~	1.55	4.	1.40	9		. 7	0.91	, 1		20.0	0 1
	.0	2	2.10		1.93	.2	N	7	2.4	-	1	113	
	NORMAL	0	3.14	1.96	2.32	0.354	15.27	٥	4.62		. 3	0.522	15.3
	MILITARY	6	3.71		2.10	4	5	0	66.6	-	C	1.139	, ,
	HAX AG	~	2.15	8	1.99	-		~1	18.09	15.34	16.59	1.393	8.40
00	JOLE	٥	0.89	-	~	5 2 3	~		0 4 0	0		1	
	INTERMER	2	0.45	0	~	.25	-3	2	0.27		0.16	: -	7.7
	. 0.3	~	0.58			.20	~	2	19.0	~	0.50		8
	201111111111111111111111111111111111111	3 - 3	1.55	0.13	0.97	0.303	31.35	•	2.20	1.06	1.42	0.420	9
	11011481	, ,	10.2			+	-	6	5.10	4	4.00	0.	9
	9 4 4	~	1.35	~		03	2.86	m	11.41		11.04	0.456	
NO.		6	1.36	· v	0.89	1	3	5	64.0	0.23	3	180.0	C
	INTERMED. 1	2	1.35	1.10	1.22	0.177	14.43	2	0.80	0.65	0.72	100.0	14.4
•	.0.	2	1.52		1.50	20	0	2	1.77	1.65	-	0.064	. ~
	NORMAL	,	2.41	. 5	1.75	4	~	•	3.55	1.00	6.	0.709	1 5
	- 1 L L L A N L	, .	5.24	9.	1.17	un.	~		6.32	1.87		1.491	00
	24 44	~	61.0		3.66		0	.,	6.08	10.4	.5	865.3	18.01
1 x05		0						•	0	~	9		
-	INTERMED. 1	0						2	4			•	•
-	.03	0						2	0.93	06-0	0.91	0.021	2.32
	NORMAL	0						0	6.	0	. ~		
	VIL 17 312 T	0						٠	*	3.	=		

10.0c 3.50t 2.0 16.84

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-D04-1275
INVENTORY

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : JES-5

TEST LOCATION : TELEDYNE, NEO

BOOGS CATEGORY M TESTS ONLY

ENGINE 2, PAGE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

227.84 0.00 47.14 117.51 70.25 94.36 1.9900 1.957 0.46 0.00 0.78 1.62 2.75 SMONE NUMBER MEAN 0.00 0.00 0.52 0.00 0.52 VALUE 1.56 0.00 1.85 4.32 3.16 1.26 * COEF 21.2 63.4 82.8 105.0 --- MEAS. FUEL FLOW - # /HR ---453 590 11468 7620 8323 MEAN 446 590 1130 2490 8220 460 460 1160 11570 2770 8430 IDLE INTERMED. 1 INTERMED. 2 NORMAL MILITARY TEST MODE

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBENE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : J85-5

SET 1492-504-1275

REPORT DATE C2/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 2, PAGE 1

TEST LOCATION : TELEDYNE, NEO

**** CATEGORY C TESTS UNLY ****

EXHAUST MASS EMISSION INDICES :

1.53 1.50 1.54 0.064 1.03 0.55 0.87 0.89 0.035	9 9 6
	1.55 1.50 1.03 1.03 0.55 0.55 0.92 0.87

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : J85-5

SET 1492-004-1275

TEST LOCATION : TELEDYNE, NEG

REPORT DATE CZZIIZZZZ USAF CONTRACT FZ96GI-75-C-CO46

ENGINE 2. PAGE 2

SASSA CATEGORY C TESTS ONLY SASSA

MEASURED FUEL FLOW & SMOKE NUMBER :

	STAD & COEF					1.35
						346
NUMBER	MEAN	:				1. 35
- SMOKE	NIN	1 1 1 0 1	00.0		30.0	200
**************************************	X	10 1	00.0		0.00	2,50
	200		- 0	ɔ c		• ~
•	2 COEF					00.00
/HR	STND					0.0
FLO 1	MEAN					2640
MEAS. FUEL FLOM - #/HR	MIN	1 1 1 1 1	4.50		1450	2640
73H	YAX		4.50		1450	2640
	NO.		- 0	0	-	62
	TEST MODE		INTERMED. 1	INTERMED. 2	NORMAL	MILITARY

SCOTT ENVIRONMENTAL TECHNOLOGY ENC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

NEPORT DATE CENTITY USAF CONTRACT F29601-75-C-0046

ENGINE 3, PAGE 1

ENGINE 400EL : J60-PØ & PSR

**** CATEGORY A TESTS ONLY ****

TEST LOCATION : ANDREWS AFB

EXHAUST MASS EMISSION INDICES :

	NO.	VALUE	MIN VALUE	MEAN	STND	Z COEF	NO. 085	WAL UE	MIN VALUE	HEAN	STAD	Z COEF
THE IDLE		9.86	7.37	8-11	1.0.54	12.98		45 4		1 13	120	
INTERMED. 1	0						40		3.10	31.6		
INTERNED. 2	С						0					
NORMAL	2	0.25	0.13	0.19	3.085	44.66	2	0.43	0.27	0.35	0.113	32.3
MILITART	2	0.23	9.10	0.16	0.092	55.71	2	64.0	0.26	0.37	0.163	43.37
101.5	2	73.10	63.16	58.13	1.030	10. 32	•	3 32	3 76			
INTERNED. 1	C					35.65	v C	0	0.07	2116		
	0						o c					
NURMAL	2	5.93	5.78	5.85	0.106	1.81	2	11.7	10.4	11.0	0.02	0.8
MILITARY		4.32	3.94	4.13	9.206	6.51	2	16.1	9.5	9.0	0.64	0.66
10.6		5	4 2 1	43	000	00.0						
INTERMED							• 0	71.0	79.0	19.0		
INTERMEG. 2	0 0						a c					
NORMAL	2	4.07	3.73	3.90	0.240	6.16	~	8.25	6.53	7.30	1.216	16.4
"IL ITARY	2	4.77		4.50	0.375	8.32	2	12.28	9.01	19.61	2.312	21.72
IDLE	2	0.16	3.11	0.13	0.035	26.19	N	0.07	0.05	0.04	410.0	28.67
INTERMED. I	31						0					
INIERMED.	0	1	3				0					
NORTAL	~	3.31	3.14	3.22	0.126	3.73	7	6.71	5.50	6.10	0.856	14.0
WIL ITARY	2	3.90	3.67	3.78	0.163	4.30	2	10.03	7.80	8.41	1.577	17.69
10,4	~	1.37	1.55	32	6.1.26	2.10	c	0.47	44			13 61
INTERMED. 1	5				2			•			0	17.0
INTERMED. 2	a						0					
NORTAL	2	0.76	65.0	13.0	0.120	17.81	2	1.54	1.03	1.28	0.361	0.80
MILITARY	^	0.87	15.0	0.72	0.212	29.46	2	2.25	1.22	1.73	C.726	41.96
3701	J						2	9.29	9.25		6.628	10.
	0						0					
INTERMED. 2	C						0					
NORMAL	0						2	1.21	1.05	1.13	0.113	10.01
YARY TITARY	0											

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046
SET 1492-D05-1275
SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY EVGINE MODEL SUMMARY REPORT

TEST LOCATION : ANDREWS AF3

ENGINE 3, PAGE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

ENGINE MODEL : JEJ-PC & P55

TEST MODE	0.00	MAX	AIN VALUE	MEAN	STND DE V	* COEF	.00	MAX	MIN VALUE	MEAN	STND	* COEF
							:					
1.5	2	065	224	455	5.64	10.88	2	1.83	0.25	1.04	1.117	
168850. 1	O						O					
TEPMEC. 2	0						0					
VORMAL	2	2025	1750	1888	194.5	10.30	2	20-17	17.25	18.71	2.065	11.04
ILITARY	2	2575	2125	2350	318.2	13.54	2	22.50	17.75	20-13	3.359	16.69

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TUPBINE ENGINE EMISSIONS INVENTORY ENSINE MODEL SUMMARY REPORT

TEST LOCATION : ANDREWS AFB

SET 1492-005-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 3, PAGE 1

645 In 460EL : J69-PG & PSB

**** CATEGORY B TESTS ONLY ****

EXHAUST MASS EMISSION INDICES :

THE IDEE	085	VALUE	VALUE		DE V	VAR	. 08	XAN	NIN	HEAN	STND	# COEF
A HE G.	1			1	1 1 1 1				-			
	υ	15.21	6.02	10.29	3.904	37.94	10	6.92	2.11	4.72	1.740	111
	1	1.31	0.43	0.71	0.315	44.16	1	1 4 4	3	0 10	199	
INTERMED. 2	1	0.48	0.16	0.32	0.099	31.15		0.64	0.21	1	137	
NORMAL	8 0	0.29	0.05	0.12	0.078	64.71	• •	0.53	0	0.24	141	0 4
- ILITARY	a 0	0.18	0.03	0.07	0.058	78.04	00	0.41	60.0	0.18	0.129	6 6
IDLE	œ	82.02	63.24	71.60	6.876	0.40	a	17 7	3 00			(
INTERMED. 1	1	33.22	21.45	24.80	2.910	11.73			2000	20.00	21.0	5 .
INTERMED. 2	1	16.33	13.33	14.80	0.980	6.62		23.0	17.5	21.1	20.0	:.
NORMAL	æ	6.63	5.23	5.69	0.445	7.82	· ox	10.		1111		•
MILITARY	r	4.46	3.58	3.81	0.306	8.01	g. (10.2	8.8	3 . 0	0.61	0
DLE	æ	1.68	1.06	54.1	0.204	13.68	ď	08.0	3	0	000	
INTERMED. 1	1	7.64	2.10	2.36	0.170	7.21		200		2 2 2		
INTERMED. 2	7	3.33	2.17	3.09	0.182	2000	1	21.7	101	26.32	****	
NORMAL	83	4.34	3.68	4.10	0.224	5.46	· a		1 0 0			
MILITARY	a)	50.5	4.70	4.76	0.300	000	5 a			00.0	811.0	
						43.0	0	16.13	0.	11.83	1.071	6
1016	(10)	1 - 4 7	0.07	0.39	0.473	122.05	ю	0.71	0.03	0.18	0.226	125
	7	2.31	1.18	1.73	0.343	19.75	1	2.37	1.21	1.70	0.376	200
INTERMED. 2	1	3,03	2.13	2.53	0.281	11.13	1	69.4	3.09	3.61	0.551	15
NOBARI	œ	3.78	3.13	3.56	0.214	6.01	•0	7.96	5.94	7.29	0440	
HILITARY	æ	4.52	3.67	4.21	0.251	5.95	.10	11.42	8.2t	10.47	1.015	6
ISLE	æ	1.53	51.0	1.10	0.433	39.33	30	0.68	50-0	0.50	0.107	9 4
INTERMED. 1	1	0.92	0.32	0.63	0.191	30.37	- 1	30.0	0.33	14.0	40.0	0 0
INTERMED. 2	1	0.68	0.31	0.56	0.132	23.55	1	0.95	0.45	0.70	4	
ALE HAL	80	91.0	0.32	0.53	0.154	28.71	- 00	1.59	0.67	1.00	901.0	20.
"IL ITADY	88	0.81	0.30	0.55	0.191	34.66	100	1000	0.75	1 36	200	2 2 2
	·											
10000	7 0						no	0.29	3.26	3.28	0.010	3.7
	0							0.61	0.54	0.59	0.030	5.1
INTERMED. 2	0 0						1	0.93	0.19	0.85	0.051	5.9
NA PARA	5						30	1.30	1.09	1.22	0.074	6.0
TILITARY	0						90	1.62	1.35	1.49	0.085	9.9

SET 1492-005-1275 SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE #03EL : J63-PB & P58

TEST LOCATION : ANDREAS AFB

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-G046

ENGINE 3. PAGE 2

**** CATEGORY B TESTS ONLY ****

METSURED FUEL FLOW & SMOKE NUMBER :

	A COEF		56.46	45.17	22.54	22.28	25.35
	STND		1.088	3.033	3.115	3.796	4-412
NUMBER	MEAN		1.93	6.71	13.82	17.34	17.41
SHORE	MIN	*****	19.0	3.50	9.75	11.75	10.50
	MAX		4.00	10.50	18.75	22.00	22.50
	0.00		.0	1	1	99	•
•	A COEF		3.13	5.12	5.70	6.03	6.15
*/HK	STND		14.4	50.5	81.1	123.3	152.5
FL0# -	HEAN		460	186	1423	2045	2483
MEAS. FUEL	VALUE		440	006	1320	1825	2250
HE	YAX		180	1025	1550	2175	2710
	. 00 00 00 00		r	7	7	30	a,
	TEST MODE		101.5	INTERMED. 1	INTERMED. 2	NORMAL	HILITARY

SCULT ENVIRONMENTAL TECHNOLOGY INC. USAS TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J60-FB & P58

TEST LOCATION : ANDREWS AFB

ENGINE 3, PAGE 1

**** CATEGORY C TESTS ONLY ****

EXHAUST MASS EMISSION INDICES :

TEST MODE	00 S	MAX	MINVALUE	MEAN	STND	Z COEF	0 0 0 0 0	VALUE	NIE	HEAN	STND	-
	20	0.73	6.73	6.73	00000	00.00	1 ~ 0	3.23	2.99	3.11	0.170	5.46
INTERMED. 2 NURMAL MILITARY	0 ~ ~	0.10	0.00	0.07	0.035	47.14	3000	0.20	0.10	0.15	0.071	
JOLE INTERMED. 1	200	62.69	63.99	64.89	1.273	1.96	. 25	30.7	29.3	30.0	000.0	
NORMAL	0 2 2	6.38	5.33	3.71	0.6742	12.68	30 ~ ~	12.1	2.7	9.6	1.06	
INTERMED. 1	< 0 c	1.59	1.50	1.54	790.0	4.12	~ o	92.0	0.67	0.71	190.0	
LARY	2 2 2	5.10	3.62	3.95	974.0	11.98	0 7 2	9.01	6.81	7.94	2.249	19.06
INTERMED. 1	~ o o	0.18	0.15	0.16	0.021	12.86	~ 0	0.08	10.0	0.07	0.007	
	200	3.52	3.08	3.30	0.311	9.43	0 ~ ~	7.39	5.84	6.61	1.096	16.57
IDLE INTERMED. 1	N 0 C	7	1.32		0.085	6.15	N O	3.69	45.0	0.0	0.011	11.05
WILETARY	~~	0.17	0.54	0.65	0.233	24.83	0 ~ ~	1.62	1.03	1.32	0.651	31.49
INTERACO. 1 INTERACO. 2 NORMAL	30000						~~~~	0.29	0.55	0.28	0.0314	3.75

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-D05-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 400EL : J63-P0 & P58

TEST LOCATION : ANDREWS AFB

ENGINE 3, PASE 2

**** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

	*	,	MEAS. FUEL	1014	HH/	•			SHOKE	NO NO LE	1	-
16ST #00E	.08 085	VALUE	MIN VALUE	2 4	STND	* COEF	#0 000 S	MAX	MIN	MEAN	STND	* COEF
	1		1	1 1 1 1								
1001	2	480	445		24.7	5.35	2	3.25	1.50	2.38	1.237	52.10
INTERMED. 1	N	515	925		35.4	3.72	0					
INTERMED. 2	2	1405	1320		60.1	4.43	0					
NORMAL	2	2100	1900	2000	141.4	7.07	2	20.50	20.25	20.38	0.177	0.87
WIL ITARY	2	2450	2250		141.4	6.02	2	22.25	22.25	22.25	0.000	0.00

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SCOTT EVVENDMENTAL TECHNOLOGY INC.
DOAF TURSING ENGINE EMISSIONS INVENTORY
ENGINE FODEL COMMARY REPORT

ENGINE MODEL : J79-15

SET 1492-06 -2750

TEST LOCATION : MELLY AFB

**** CATEGORY A TESTS ONLY ****

EXEAUST MASS EMISSION INDICES :

Interfer Interfer		18.51 #00E	088 088	WALUE	MINVALUE	HEAN	STND	* COEF	080	MAX	MIN	MEAN	STND	* COEF
MARCHED 1 10.26				14.39	14.39		1	-				- 1	1	4
1.33	TATE		5						- 0	15.98	15.98			
1.33	TOUR	•	· c						9 0					
Dec	1	740	- .	0.26	0.26					. 23	:			
1.84 1.84	177		-	0.19	0.19				• •	1.33	1.33			
10 10 10 10 10 10 10 10	44.5	4.5		1.84	1.84				-	1.09	1.69			
INTERMED. 1 1 20.00 58.28 1 1 1 1 1 1 1 1 1	£01.F									96.00	90.00			
NUMBER N	INIE	0.37	٦ (29.58	58.28				-	4.11				
10 24.3 24.5 2.16 2.	SULVI		0						• c	•	.,,			
10 10 10 10 10 10 10 10	1 6 6 6	•												
1	1 200		-	4.68	4.58				٠ .					
19.2 19.3 19.3	1:1	- A	. 7	2.16	2.16				-	24.3	24.3			
10 10 10 10 10 10 10 10	YVY	9		71.33	71.11				-	19.2	19.2			
IDLE									-	2344.3	2344.3			
INTERFED. 1			-	2.50	2 50									
NATERIES 1 5.47	INTER		0	2	00.3				-	2.78	2.74			
10 10 10 10 10 10 10 10	INTER		2 6						0					
100 100	0 to 0								0					
1 8.73 8.73 1 78.84 1 1 1 1.04 1.04 1.04 1.04 1.04 1.04 1.		,	-	2.47	2.47									
1 3.10 3.10 1.16 1 1.04 1.09 1 1.04 1.09 1 1.04 1.09 1 1.04 1.09 1 2.18 4.78 1 2.18 2.18 1 2.18 2.18 1 1.0.46 1 0.78 0.48 1 0.78 0.78 0.78 1 0.92 0.92 1 3.12 1 3.12	1777	4.1	_	8.73	8.73				٠.	24.82	28.46			
7. 1	d YNL	n	-	3.10	3.10				٠.	11.83	17.03			
7. 2 0 1 1.04 1.04 1.04 1.04 1.05 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									-	101.86	101.86			
1 1.16 1 2.18 4.78 1 2.18 2.18 1 1.46 1.46 1 2.592 2 1 1.794 1.794 1 2.18 2.18 1 1.62 1 2.50 1 0.78 0.48 1 0.92 0.72 1 30:12 3 1 31:2	IDLE		-	1.04	1.04									
1. 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	INTER		C						-	1.16	1.16			
1 1.98 4.78 1 1 25.92 1 1 25.92 1 1 25.92 1 1 2.18 2.18 2.18 1 10.88 1 1 11.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1.62 1 1 1 1 1.62 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	INITES		0						0					
1 7.96 7.96 1 1 25.92 1 1 20.88 1 1 70.88 1 1 71.74 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NORTA	2	-	66.4	40.4				0					
1 2.18 2.18 1 1.0088 1 1 1.46 1.46 1 1 1.62 1 1 0.48 0.48	, it. 11	101	7	1.96	7.04					25.92	25.92			
1 1.46 1 1.46 1 1.62	MAX A	2	-	2.10	0				-	10.88	70.88			
1 1.62 1 5.46 1.46 1 0.78 0.46 1 0.92 0.92 0.92 1 0.67 1 0.67					01.3				4	71.74	71.74			
. 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1316		~-	1.46	1.46									
14/15P4ED. 2 0 0.46 0.46 0.46 0 0 0 0 0 0 0 0 0	INTER!		0		2				-	1.62	1.62			
D.48	INTER								0					
#AX #4	NONMA			0	9 0				0					
1	× [LII	187		2 7 6					7	2.50	2.50			
1 30:12 3 141ER4ED. 1 0 141ERAED. 2 0 167.2 112 141ERAED. 2 0 15.12 15.12 15.13 15.13	MAX AP			000	27.0				7	76-9	20.9			
1016 14768-10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				24.0	76.00				7	30:12	30.13			
JUTERAED. 1 0 0.67 INTERMEU. 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1365		c								71.00			
INTERMED. 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	IMTERA		0						-	0.67	0.67			
3.12	INTERM								0					
MILTIARY 0 3-12	NORMAL		2.5						0					
P. 2.34	MILTIA	* 0							-	2 12				
5.54			5 (71.0	3.16			
			0						-	5.34	5.34			

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7 SCUTT ENVIRONMENTAL FECHNOLOGY INC. USAFTURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : J79-15

SEC 1492-06 -2750

REPORT DATE 02711777 USAF CONTRACT F29601-75-C-0046

TEST LOCATION : KELLY AFB

ENGINE 4, PASE 2

**** CATEGORY A TESTS ONLY ****

14	
NIN	
ž	
15	
SMOKE	
Y	
(4)	
1	
14	
14	
3 1311	
A FUFI F	
ALD FUFI F	
Suata Fuffi F	
A SURE O FUEL F	
REASURED FUFIE	

		×	MEAS. FUEL FLOW - #/HR	FLON -	# /H #		•		SMOKE NUMBER	NUMBER	-	
TEST MODE	080	VALUE	VALUE	A A A	SIND	* COEF	0 N O	VAX	MIN	MEAN	STND	* COEF
			'	1	1						•	
IDLE	1	1110					-	21.42	21.42			
INTER 450. 1	0						0					
INTERMED. 2	0						0					
NORMAL		52.90	5230				1	57.62	57.62			
MILITARY	1	8910	8910				1	58.42	58.42			
THE X ME	-	32854	32804				-	24.48	24.46			

SET 1492-06 -2750

SCOFF ENVIRONMENTAL TECHNOLOGY (NC. USAF TCREINE ENSINE EMISSIONS INVENTORY FYGINE HODEL SUMMARY REPORT

4505E : 379-15

ENGINE

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 4, PAGE 1

TEST LOCATION : KELLY AFS

**** CATEGORY B TESTS ONLY ****

EXMANST MASS EMISSION INDICES :

0. 1	* A H A A	TEST MODE	NO.	XAL	NIN	KERN	STND	* COEF	NO.	X Y Y	NIN	MEAN	STND	
MICEMED 1 1 1 1 1 1 1 1 1	1				2014	1	ן ה	*	0.88	VALUE	-		DE V	
NITEMED 1 1 2 2 2 2 2 2 2 2	0	1000	S	12.43	5.58	3		27 10		1 1 1 1 1 1		-		
NARMAR N			5	5.75	1.58				ο.	24.47	6.39	11.36	3.214	
NORTHAL NO.			5	0.84	0.00		, ,		n	7.15	2.32	5.04	2.697	
MILITARY S			16	1.51	0 0		? "	113.87	•	6.16	0.63	2.06	2.332	
10 10 10 10 10 10 10 10		MILITARY	ď	4	61.0		0 0	112.89	S	8.42	1.02	2.75	3.188	
The part of the		KAX AS	n ur					111.55	ın	90.9	64.0	2.06	2.311	
INTERRED. 1			,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			3	80.25	S	2	24.59	185.26	67.782	
INTERRED. 1 5 32.38 19.28 25.96 4.857 18.70 5 51.55 10.094.8 **LITARY		1965	5	5.3	53.37	-	0	0	ı					
NUMERATED 2 2 2 2 2 2 2 2 2			S	2 . 4	10.01			•	n	3	9.09	9.49	5.42	
MAK AS 17.85 17.			10	0	2 63		0 1		S	:	28.4	39.5	8.30	
NEERTED. 3 2.54 2.44 2.45 1.512 22.19 5 2254.9			· ur	22. 3	70.7		5	-	'n		19.7	23.0	3.74	
Out		,	7 1	3.37	24.0	1	.50	14.3	5		21.1	24.2	4.00	
NULE			0 :	1.7	1.90	~	0 4.	-	S		17.1	20.5		
INTERMED. 1 3 2.54 2.41 2.46 0.068 2.76 3 2.90 INTERMED. 2 5 8.51 5.62 6.84 1.045 15.29 INTERMED. 2 5 8.51 5.62 6.84 1.045 15.29 INTERMED. 3 5.02 11.30 INTERMED. 1 5 1.58 0.72 1.09 0.336 30.87 5 101.45 INTERMED. 2 5 5.87 1.41 2.09 0.336 30.87 5 101.45 INTERMED. 2 5 5.87 1.41 2.09 0.336 30.87 5 1.77 INTERMED. 3 5 1.58 0.72 1.09 0.34 14.05 INTERMED. 3 5 1.59 0.34 1.37 0.291 24.35 INTERMED. 3 1.59 0.34 1.37 0.291 24.35 INTERMED. 3 1.39 0.34 1.37 0.291 24.35 INTERMED. 2 5 0.34 1.37 0.291 24.35 INTERMED. 3 1.31 0.33 0.36 0.376 1.36 45.33 INTERMED. 2 5 0.34 0.44 0.67 0.120 18.15 INTERMED. 2 5 0.34 0.44 0.67 0.120 18.15 INTERMED. 2 5 0.34 0.44 0.67 0.120 18.15 INTERMED. 3 1.31 0.53 0.36 45.33 INTERMED. 2 5 0.34 1.62 0.736 45.33 INTERMED. 2 0 0.34 1.62 0.736 45.33		24 A A D	0	3.3	38.46		17	60	ur.	182	421 3			
INTERNEO 3 2.54 2.41 2.46 0.068 2.76 3 2.90 2.7 INTERNEO 3 3.32 3.02 3.16 0.145 4.60 3 5.09 4.3 INTERNEO 2 5 3.51 3.02 5.16 0.145 4.60 3 5.09 4.3 INTERNEO 2 5 3.51 3.02 5.16 5.19 5.19 5.19 INTERNEO 2 5 5.65 6.69 3.41 0.713 20.91 3.47 26.1 INTERNEO 2 5 5.69 3.41 0.713 20.91 5.19 5.10 INTERNEO 3 5 5.69 3.41 0.713 20.91 5.19 5.10 INTERNEO 3 5 5.69 5.49 5.10 5.19 5.10 INTERNEO 3 5 5.69 4.70 5.69 5.10 INTERNEO 3 5 5.69 4.70 5.69 5.10 INTERNEO 3 5 5.69 4.70 5.69 5.10 INTERNEO 3 5 5.70 5.10 5.10 5.10 INTERNEO 3 5 5.10 5 5.10 INTERNEO 3 5 5.10 INTERNEO 3 5 5.10 INTERNEO 3 5 5.10 INTERNEO 5 5.10 5 5.10 INTERNEO 6 5 5 5 INTERNEO 7 5 5 5 INTERNEO 7 5 INTERNEO 7 5 5 INTERNEO 7 5 5 INTERNEO 7 5 INTERNEO 7 5 5 INTERNEO 7 5 5 INTERNEO 7									,	• • • •	20170	0	239.88	
INTERRED. 1 3 3.31 3.02 3.16 0.145 4.60 3 5.79 4.27 7.70 7.70 5.71 5.29 4.15 7.70 7.70 5.71 5.70 7.75 7.75 7.75 7.75 7.75 7.75 7.75		3 101	2	2.54	2.41	2.46	-	2.76						
INTERMED. 2 5.00 4.3 1.00 5.00 4.3 1.00 5.00 4.3 1.00 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00 4.3 5.00			~	12.51	3.00	71 2		0.0	n .	•	2.71	-	7	
NOBMAL NOBMAL			í	00		900	:		~	•	4.3	8	~	
MAK AS 11.30			· in	4 55	20.0	0 1		n	2	•	1.2	9.0	F.	
NAK AS 1.56 1.57 1.56 1.519		"ILITARY		11.30	2			"	0		6.1	0.	1.	
Interference		HAK AS	· is	06	000	0	? '	0	u)	:	8.0	0.2	.5	
100 1			,	22.		7			Δ.	13.	6.5	95.20	13.410	
INTERMED. 1 5 2.27 1.41 2.03 0.336 50.87 5 3.49 INTERMED. 2 5 7.76 4.79 5.13 1.CS9 17.29 NULLITARY MAX AS 5 5.96 4.79 5.13 1.740 5 5.109 6 5.1009 INTERMED. 1 3 1.39 0.34 1.17 0.291 24.87 3 1.58 INTERMED. 2 5 0.34 1.17 0.291 24.87 3 1.58 INTERMED. 3 1.39 0.34 1.17 0.291 24.87 3 1.76 INTERMED. 2 5 0.34 1.17 0.291 24.87 3 1.76 INTERMED. 3 0.34 0.49 0.71 0.144 2.6 5 6.06 INTERMED. 3 0.34 0.49 0.71 0.149 19.80 5 9.89 INTERMED. 1 0 0 1.11 0.63 0.86 0.170 19.80 5 9.89 INTERMED. 1 0 0 0.46 INTERMED. 1 0 0 0.46 INTERMED. 1 0 0 0.46 INTERMED. 2 0 0 0.46 INTERMED. 2 0 0 0.46 INTERMED. 3 0.84 INTERMED. 3 0.84 INTERMED. 3 0 0.46 INTERMED. 45.33 5 0.46 INTERMED. 45.33 5 0.46 INTERMED. 45.31 5 0.46 INTERMED. 5 0 0.46 INTERMED. 7 0 0.46 INTERMED. 7 0 0.46 INTERMED. 8 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0 0.46 INTERMED. 8 0.46 INTERMED.		10LE	S	3.5	7	C	,		,					
INTERMED. 2 . 5 . 7.76 4.79 1.717 5 3.49 1.717 8 5.49 1.7			·r	2 27		•	0 0	3 /		•	8	2.		
MILITARY				7 74				-	un.	m	2.0	0	5	
MILITARY MAX AG MILITARY MAX AG 1016 1016 1016 1016 1016 1017 1016 1017 1016 1017 1017 1018 10			11				. L S		w)	9	5.1	5.4	4	
MAX AS		20011		0.00			.0	3	S	-	2.2	6.5	1	
TOLE			0 1	10.43			. 4	-	5	m	8	2.5		
101E 1.59 0.34 1.17 0.291 24.87 3 1.58 1.58 1.46 1.47 0.291 24.87 3 1.58 1.58 1.46 1.47 2.59 2.49 2.49 2.49 3 1.58			5	2.00	0		.1.	8.10			8.1	52.10	14.308	
INTERMED 3 1.59 0.34 1.17 0.291 24.87 3 1.58 1.476 1.405 1.405 3 1.76 3 1.76 3 1.76 3 1.76 3 1.76 3 1.76 3 1.76 3 1.76 3 3.76 3.84 3.49 3.74 3.10 3.1		134.6											•	
INTERFED. 2 1.11 0.64 1.00 0.140 14.06 3 1.76 NORMAL 5 0.84 0.49 0.71 0.124 18.15 5.06 MILITARY 5 1.11 0.63 0.86 0.170 19.80 5 9.89 INTERFED. 2 0 0.46 1.14 1.62 0.736 45.33 5 49.59 3 10.86 INTERFED. 2 0 0.46 NORMAL 0 0 0 0.736 0.736 0.736 0.736 0.45 NORMAL 0 0 0.736 0.736 0.736 0.736 0.45 NORMAL 0 0 0.736 0.736 0.736 0.736 0.736 0.45			w .	1.39		1.17		00	89	1.58	76.0	1.30		
NORTHER D. 2 0.49 0.71 0.129 18.15 5 6.06 NORTHER D. 2 0.44 0.67 0.144 2.64 5 4.53 49.59 3 1016 0.10			•			1.00			~)	1.76	1.23	1.52	2000	
MULTIARY 5 0.84 0.44 0.67 0.144 21.64 5 4.53 MILITARY 5 2.91 1.14 1.62 0.736 45.33 5 49.59 3 10.6		• •	n	1.0	± .	0.71		-	S	6.08	17.7	20.3		
MAX AS 5 2-91 1-14 1-62 0-170 19-80 5 9-89 8 10-80 10-80 10-80 5 9-89 8 10-80		JAE 107	2	18.0	7	0.67	-	4				03.6		
MAX A3 5 2.91 1.14 1.62 0.736 45.33 5 49.59 3 IDLE INTERMED. 1 0 0.46 INTERMED. 2 0 0.46 NORMAL MILITARY 0 5 2.15		MILITARY	S	1.11	0	0.86		α	1	000	15.7	2.34		
IDLE INTERMED. 1 0 0.46 INTERMED. 2 0 0.46 NORMAL MILITARY 0 2 2.15		MAX AB	5	16.6	-	69			n	4.84	2.61	7.68		
IDLE 10.2 10.46 0.2 10.6 10.2 10.6 10.2 10.6 10.2 10.6 10.2 10.6 10.6 10.2 10.6 10.6 10.6 10.6 10.6 10.6 10.6 10.6						30.0		2	n	49.59	37.39	43.10	5.749	
1 0 5 0.46 0.2 2 0 5 0.46 0.2 3 0 3 1.4 0 5 2.15 1.0		101.6	С								,			
2 9 5 0.61 0.2 0 3.03 1.4 0 5 2.15 1.0			0						Α.	94.0		0.32	-	
0 3.03 1.4			0						0	0.61	.2	0.45	-	
5 2-15 1-0			0						n	3.03	7.	2.05	8	
		MILITARY							2	2.15	0.	1.50	0.577	
3.59 1.7		***	,						£.	2 5.0	,			
		DH VI	0						•	40.0	:	5000	•	

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENSINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-06 -2750

REPORT DATE 62/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 4, PASE ?

ENGINE 400EL : J79-15

TEST LOCATION : KELLY AFB

**** CATEGORY B TESTS ONLY ****

MEASURED FUEL FLUM & SMONE NUMBER :

TEST MODE	NO.	WALUE	MIN VALUE	MEAN	STND	* COEF	0 80	A A L UF	MIN	MEAN	STAD	COEF
	1			-			-		1		-	
TOLE	0	1160	1125	1135	15.4	1.36	u)	23.82	15.65	21.33	3 615	
INTERMED. 1	in	1590	1455	1518	53.9	3.55		4 3 - 1 3	24.45	20 40	2000	
INTERMED. 2	'n	7570	1270	7416	125.7	1.69		44 25	20.07	20.00	70.00	
UDRMAL	5	5565	5215	5397	146.7	2.12		62.75	55.75	2 4 0 4	2 2000	
ALLITARY	S	8980	8830	8923	65.5	0.73		61.75	0 0 0	20.00	007.0	
AX AS	5	32924	16658	28897	6924.0	23.88	n vn	51.50	90.00		0.01	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENSINE EMISSIONS INVENTORY
ENSINE MODEL SUMMARY REPORT

ENCINE 400EL : J79-15

SET 1492-06 -2750

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

**** CATEGORY C TESTS ONLY **** TEST LOCATION : MELLY AFB

ENGINE 4, PAGE 1

EXHAUST MASS LMISSION INDICES :

11.54 11.54 11.54 12.96 12.96 12.96 12.96 13.55 13.5	AKAN ILSI MODE	088	VALUE	VAL UE	IE P.	STND	Z COEF	000	MAX	MIN	HEAN	STND	* COEF
ED. 2 0.22 0.22 0.15 IRY 1 0.22 0.22 0.15 IRY 1 0.36 0.15 0.16 ED. 1 0.36 0.36 0.36 ED. 2 0.36 0.36 0.36 ED. 2 0.36 0.37 0.37 ED. 1 0.30 0.30 0.30 ED. 1 0.30 0.30 0.30 ED. 1 0.30 0.30 0.30 ED. 2 0.30 0.30 0.30 ED. 3 0.30 0.30 0.30 ED. 1 0.30 0.30 0.30 ED. 2 0.30 0.30 0.30 ED. 3 0.30 0.30 0.30 ED. 1 0.30 0.30 0.30 ED. 2 0.30 0.30 0.30 ED. 2 0.30 0.30 0.30 ED. 2 0.30 0.30 0.30 ED. 3 0.30 0.30 0.30 ED. 1 0.30 0.30 0.30 ED. 1	101.6		11.54	11.54	1	1		!					
FRY 1 0.22 0.22 1 1.163 1		C						٠, (12.96	12.58			
F.Y	0.	0						3 C					
1.34	NORMAL	7	0.22	0.22									
ED. 1	"IL ITARY		0.15	0.15					1.18	1.18			
ED. 1	MAX A3		0.36	0.36				•	11.53	1.54			
ED. 1									70	79.11			
1		-	44.25	49.25				-	5.5.4				
ED. 2 3.83 3.83 3.83 RY 1 1.91 1.91 1.72 ED. 2 1 34.10 34.10 1.55.0 ED. 2 1 2.16 2.16 1.29 ED. 2 1 2.16 2.36 1.29 RY 1 2.36 2.36 1.29 RY 1 2.09 2.09 1.29 RY 1 0.46 0.46 1.29 RY 1 0.76 1.76 1.25 RY 1 0.76 1.29 1.29 RY 1 0.76 1.29 1.29 RY 1 0.76 1.20 1.20 RY 1 0.7		C						• =					
ED. 1 3.83 3.43 RY 1 1.91 1.91 1 1.91 1.91 1.72 1 34.10 34.10 1.095.0 ED. 2 0 0 0 ED. 2 0 0 0 ED. 1 0 0 0 ED. 2 0 0 0 ED. 1 0 0 0 ED. 2 0 0 0 ED. 1 0 0 0 ED. 2 0 0 0 ED. 3 0 0 0 ED. 4 0	0.	0						o c					
87 1 1.91 1.91 1.7.2 1 34.10 2.16 1.055.0 1.095.0 20.1 0 2.16 2.16 1.24.9 87 1 2.16 2.36 1.236 87 1 2.36 2.36 1.236 80.1 1 2.36 1.236 1.01 80.1 1 1.01 1.01 1.01 80.1 1 1.29 1.29 1.29 87 1 0.76 0.76 1.29 88 1 0.76 0.76 1.29 89 1 0.76 1.29 1.29 80 1 0.76 1.29 1.29 80 1 0.76 1.29 1.29 80 1 0.76 1.29 1.29 80 1 0.76 1.29 1.29 80 1 0.76 1.29 1.29 80	NURMAL		5.83	3.83					200				
ED. 2	MILITARY	-	1.91	1.91				٠.		5.07			
ED. 1	MAX A S	1	34.10	34.10					7-11	7.11			
ED. 1								•	0.00	10.5601			
ED. 2 0 ED. 2 0 S.16 5.16 RY 1 1 2.36 2.36 7.36 1 2.36 2.36 7.36 1 1 2.36 7.36 1 1 2.36 7.36 1 1 2.36 7.36 1 1 2.36 7.36 1 1 2.37 1 3.49 2 3.49 2 3.49 2 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.49 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 3 3.40 <td>10LE</td> <td>-</td> <td>2.18</td> <td>2.18</td> <td></td> <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td> <td></td> <td></td>	10LE	-	2.18	2.18					,				
ED. 2 0 27.36 RY 1 8.36 8.36 RY 2.36 7.95 ED. 1 0 0.90 0.90 RU. 2 0 0 0.90 RU. 3 0.90 RU. 4.70 RU. 5 0.90 RU. 6.65 RU. 7 0 0.90 RU. 8 0.90 RU. 9 0 0.90 RU. 9 0 0.90 RU. 9 0 0 0.		0						٠ .	94.7	2.46			
87 1 5.16 5.16 8.36 8.36 1 75.05 1 2.36 2.36 1 1 2.36 2.36 1 1 1 2.36 1 2 1 1 1 2 1 1 1 3 1 2.36 1 4 1 1 1 4 1 1 1 5 1 2 1 6 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 2 1 2 1 1 2 1 2 3 3 3 3 4 3 3 4 3 4 4 5 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 <td< td=""><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td>o c</td><td></td><td></td><td></td><td></td><td></td></td<>		0						o c					
ED. 1	VORMA	-	5.16	41.5				٠ د					
ED. 1	MIL ITARY	-	8 . 36	8.56					21.36	27.36			
ED. 1	MAX AS	-	2.86	7.85				٦.	50.67	15.05			
ED. 1			1					4	71.15	91.75			
ED. 2	IDLE	1	3.90	0.00				•					
EU. 2 3 4.70 4.70 1.65 1.65 1.65 1.66 1.66 1.66 1.67 1.65 1.65 1.66 1.67 1.65 1.66 1.67 1.65 1.67 1.67 1.67 1.67 1.67 1.67 1.67 1.67		C						- c	10.1	1.01			
87 1 4.70 4.70 1 7.65 7.65 1 7.65 7.65 1 7.09 2.09 1 1.29 1.29 1 1.29 1.29 1 0.46 0.46 1 0.76 0.76 1 0.76 0.76 1 0.45 1 0.45 1 0.45 0 0 0	.0.	3						3 0					
1 7.65 7.65 1 68.69 1 68.69 1 67.20 1	NORMAL	_	4.70	4.7				o •					
1 2.09 2.09 1 1.29 1.29 1 1.29 1 1.29 1 1.29 1 1.45 1 0.46 0.71 0.71 0.71 0.76 1 0.45 1 0.45 1 0.76 1 2.455 1 0.45 1 0.45 1 0.45 1 0.45 1 0.45 1 0.45	MILITARY		1.65	1.65				•	06.	76.67			
10. 1	MAX AS	-	2.09	2.09				٠,	64.67	50.00			
10. 1							,		0.00	07.10			
59. 1 0.46 0.46 0.46 1 2.46 1 2.46 1 0.76 0.76 0.76 1 0.76 0.76 1 0.76 1 0.76 1 0.76 1 0.45 1		-	1.29	1.29				1	1.45	1.45			
2. 46 2. 46 2. 46 3. 76 3. 76 3. 76 3. 76 4. 55 5. 46 5. 46 6. 47 6. 48 6.		2 :						0					
2.46 0.46 0.71 1 2.46 1 6.36 1 2.45 1 6.36 1 2.45 1 0.76 0.76 1 0.76 1 0.45 1 2.4.55 1 0.45 1	•							0					
1 0.71 0.71 1 24.55 1 24.55 1 0.76 1 0.76 1 24.55 1 24.55 1 0.45	NOKAN	~	94.0	96.0				-	2.46	2.44			
1 0.76 0.76 1 24.55 10.1 0 0 0.45 10.2 0 0 0 0.45 11 2.12	ALL I AR	•	0.71	0.71				-	6.36	42.4			
10.45 10.45 10.45 10.45 10.45 11.2.12	MAX AB	-	92.0	0.76					24.55	24.55			
(b. 1 0 0 0.45 (b. 2 0 0 0 0.45 (c) 2 0 0 0 0 0.45 (c) 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	101.5	0											
.6. 2 0 0 1 2-12		0						- (0.45	0.45			
7 0 0 1 2.12 1 3.59		0						0					
2.12		0						э.					
5.55	MILITARY	0						.	2.12	2.12			
	***	2						-	2 50				

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURSINE ENGINE FMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-06 -2750

USAF CONTRACT F29601-75-C-0046

ENGINE MOJEL : J79-15

TEST LOCATION : MELLY AFB

ENGINE 4, PASE 2

**** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	088	VALUE	VALUE	HEAN	STND DE V	* COEF	0.00	VALUE	VALUE	FEAN	STAD	* COEF
	-	1125	1125				1	25.88	25.88			
NTERMED. 1	0						O					
NTERMED. 2	٥						0					
	-	5390	5306				-	65.00	65.00			
ILITARY	-	8980	8930				4	62.63	62.63			
	**	32113	32113				-	4.75	4.75			

SCULT EVVIRONMENTAL TECHNOLOGY INC. LIAF TURBLING ENSINE EMISSIONS INVENTORY ENSINE MODEL SUMMARY REPORT

ENGINE MODEL : 155-A78

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

SET 1492-006-1275

ENGINE 5, PAGE 1

TEST LOCATION : KELLY, AFB

**** CATEGORY A TESTS ONLY ****

FARAUST MASS EMISSION INDICES :

		100			2		-		CN	×VH				
Control Cont	0 1 4 8 3		0.85	VALUE	VALUE		0E v	VAN	088	VALUE	VALUE		DE V	4
CONTINUE 2 23.54 17.21 20.27 4.335 21.38 2 3.50 10.07 11.00 2.284 4.997 4.097 4.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		1 1 1 1 1								
## PERROACH 0 1.50 1.50 1.50 100.05 100.05 2 7.44 1.00 4.26 4.497 10 4.26 4.497	1403	GRND. I DLE	2	23.34	17.21	20.27	4.335	21.38	2	13.30	10.01	11.68	2.284	19.55
## PROPORTION D D D D D D D D D	4 4 3	GRND. IDLE	2	13.70	1.50	6.10	6.505	106.65	2	13.7	1.08	4.26	4.493	105.57
Counting	33	PROACH	0						0					
NORTHER 1 2 3.37 0.54 2.96 3.406 115514 2 0.52 0.96 5.55 0.57 11 11 1.0 0.94 0.55 0.57 11 14 10 0.94 0.55 0.55 0.57 11 14 10 0.94 0.55 0.55 0.57 11 14 0.54 0.55 0.55 0.55 0.57 11 14 0.54 0.55 0.55 0.57 11 14 0.54 0.55 0.55 0.57 11 14 0.54 0.57 0.54 0.55 0.55 0.57 11 14 0.54 0.55 0.55 0.57 0.54 0.55 0.55 0.57 0.54 0.55 0.55 0.57 0.54 0.55 0.55 0.55 0.55 0.55 0.55 0.55	4.0	UISE	0						0					
HILITRRY 1. 13.26 30.55 2.77 12.79 120.56 2 6.56 0.55 4.61 5.614 12 1. 13.26 30.55 31.97 1.817 5.66 2 6.00 5.5 5.0 0.35 1. 13.26 30.65 31.97 1.817 5.66 2 6.00 5.5 5.0 0.35 1. 13.26 30.65 31.97 1.817 5.66 2 6.00 5.5 5.0 0.35 1. 13.26 3.26 3.27 2.46 2.52 0.00 4 2.27 2 2.04 1.55 1.55 1. 13.26 3.26 2.27 2.46 2.27 2.46 2.27 2 2.04 1.55 1. 13.26 3.28 2.27 2.46 2.27 2.27 2 2.04 1.55 1. 13.26 3.28 2.27 2.27 2.27 2.27 2.27 2 2.04 1.55 1. 13.27 2.27 2.27 2.27 2.27 2.27 2.27 2 2.04 1.55 1. 13.27 2.27 2.27 2.27 2.27 2.27 2.27 2.27	>	RMAL	C1	5.37	0.55	2.96	3.408	115.14	2	10.21	0.98	65.5	6.527	116.65
LUGGRAULIOLE 2 33.26 39.09 31.97 1.817 5.66 2 6.0 5.5	£	LITARY	(4	4.27	0.54	2.30	2.179	120.56	2	8.58	9.6	10.4	5.614	121.79
## ## ## ## ## ## ## ## ## ## ## ## ##	1.0	SRND-10LF	2	13.26	39.68	11.97	1.817	5.58	2	19.0	18.0	18.5	0.71	0.38
PARTITION Part	T	GRND. TOLE	2	9.62	7.71	8.16	0.643	7.88	2	0.9	5.5	5.8	0.35	0.61
Counties	AP	PROACH	0						0					
NORMAL 2 2.57 2.48 2.57 2.48 2.27 2 4.5 4.5 4.1 4.6 0.35	a'O	UISE	0						C					
U GRND.IDLE	ON	RMAL	2	2.57	2.48	25.5	190.0	2.52	2	0.1	1.1	4.0	0.35	0.76
U GRND.IOLE		LITARY	2	2.22	2.15	3.18	6+0-0	2.27	2	4.5	7.,	4.3	0.28	0.66
		3 101 GNGS		2 4.9	2.71	2.00	19.5.0	17.59	^	2.04	1.55	1.79	0.346	19.30
### GRAU-10LE		3701.00	3											
CRUISE CAUTSE CAUTSE	1 4	PROACH	7 C	0.03	0.0	10.0	00000	11.0	v a		•	71.5	0.150	
1987 1988		115.	2 C						1 (7					
FILTTRRY 2 9.57 9.19 9.38 0.269 2.86 2 19.24 17.41 16.32 1.294 1.294	25	141	2 6	95.5	8.98	4.27	0.410	27.5	2	18.17	15.03	17.10	1.513	8.85
LU GRND-IDLE	1	LITARY	2	15.6	61.6	9.38	0.269	2.86	2	19.24	17.41	18.32	1.294	7.36
LU GRND-IDLE														
HIGHWINDLE 1 5.86 5.86 HIGHWINDLE 1 5.86 5.86 CRUISC 0 6.34 LO SRNOLIDLE 1 6.80 0.594 33.30 2 1.30 0.79 1.04 0.361 3 HIGHWISE 0 6.80 0.65 HIGHWISE 0 6.29 0.28 0.28 0.28 0.005 APPROACH 0 6.80 0.60 0.60 0.60 0.20 0.28 0.28 0.007 APPROACH 0 6.80 0.60 0.60 0.20 0.20 0.28 0.28 0.007 APPROACH 0 6.80 0.60 0.60 0.60 0.20 0.20 0.28 0.28 0.007 APPROACH 0 6.80 0.60 0.60 0.60 0.20 0.20 0.20 0.20 0.007	200	GRAD.IDLE	ru	1.34	1.26	1.36	0.057	4.35	2	0.76	3.74	0.75	410.0	1.85
LOSPROACH D CRUISC NUMBRAL 1 6.34 8.34 NUMBRAL 1 16.91 15.91 1 15.91 1 15.91 15.91 1 15	I	GRMD . I DLE	-	9.00	S . S				-	4.23	4.23			
CRUISE NURMAL 1 8.39 8.34 NURMAL 1 8.39 8.34 1 14.98 1 14.98 1 15.91 1 15.91 1 15.91 1 0.80 0.80 1 0.80 0.894 1 15.91 1 0.80 0.80 1 0.80 0.80 1 0.80 0.80 1 0.80 0.80 1 0.80 0.80 1 0.80	07	PROACH	D.						a					
1 14.68 14.06 1 15.91 1 15.91 1 15.91 1 15.91 1 15.91 1 15.91 1 15.91 1 15.91 1 1 1 1 1 1 1 1 1	20	015E	C						a					
15.91 15.9	N	RMAL	-	0.54	8.54				-	14.88	14.00			
LO SRYD-IDLE 7 2.22 1.36 1.60 0.594 33.30 2 1.30 0.79 1.04 0.361 3 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	,	LITARY	-	8.39	8.59				1	15.91	18.91			
HI GRND-IDLE 1 0.80 3.80 1 0.56 2.56 2.56 2.56 2.56 2.56 2.56 2.56 2		SRND.IOLE	2	2.22	1.38	1.80	9.594	33.30	2	1.30	0.19	1.04	0.361	34.51
PPROACH		A TOT CHES		Ca	2				1	88.0	75.0			
CRUISE 0 0.65 0.65 1.15 1.15 1.15 1.15 1.15 1.15 1.15 1		370 400 000		00.0					• 0					
LO SRYD, IDLE 0 0.85 0.65 1 1.15 1.15 1.15 1.15 1.15 1.15 1.15			0.0											
HIGHNOLIDE 0 0.23 0.23 0.23 0.23 0.000 HIGHNOLIDE 0 0.28 0.28 0.28 0.007 APPROACH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3	0150	٠.						3 -	9.	1 15			
LO 5870-104E	2 :	TARE		000	00.0				• •	1.61	1.5			
LD 5R70-10LE 0		LITARY			9.90				•	16.1	16.1			
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		38'10.10LC	0						7	0.23	0.23	0.23	00000	0.00
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	H	SRMD.IDLE	0						2	0.29	0.28	0.26	0.007	2.48
0 0 0.78 0.21 0.78 0.035	A	PROACH	0						0					
2 0.76 0.71 0.73 0.035	CE	urse	0						0					
	NON	DMAL							2	0.76	0.71	0.73	0.035	4.81

7 SCOTE ENVIRONMENTAL FECHNOLOGY INC. USAF TUREINE ENGINE EMISSIONS INVENTORY ENGINE MOUEL SUMMARY REPORT

ENGINE MODEL : 156-A73

SET 1492-906-1275

HEPORT DATE 62/11/77 USAF CONTRACT F29661-75-C-0046

ENGINE 5, PASE 2

TEST LUCATION : KELLY, AFB

**** CATEGORY A TESTS ONLY ****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	N 0 0	MAX	MIN	MEAN	STND DE V	* COEF	0 0 0 0 8 0	WALUE	MIN	HEAN	STND	* COEF
			'					-	-			
20 VO . TO. C.	C	5.85		578	10.6		2	23.58	23.25	23.41	U. 233	•
58 40 . IDLE	2	720		708	17.7		7	30.08	30.08	30.08	0.007	0.0
APPROACH	76						90					
1135	, ,	1900	1785	1843	81.3		2	36.42	36.08	36.25	0.240	0.66
LIAPY	2	2010	1895	1953	81.3	4.16	2	37.25	35.58	35.41	1.181	3.5

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
UNAF TUMBINE ENLISTIONS INVENTORY
ENGINE MODEL SUMMARY REPORT

SET 1492-006-1275

REPORT DATE 02/11/77 USAF CONTRACT F29651-75-C-0046

30.5							D IESTS ONLT	****					
	EAMAGN ARS EMISSION INDICES			01 / # -	1000 8 6 1151						9		
PARAM	TEST MODE	NO. 085	AA	MIN	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	Zw	0 4	N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MAX	MIN	REAN	STND	# COEF
JHJ	LO UNIDITOLE	1	25.31	16.40	21.20	3.497	16.50		10.67		13 61	1	
	HI SRND.IDLE	1	~	~			. ~	1	10.0		vu	2 200	16.35
	APPROACH	1		0.63	4.80	:	. ~	. ~	6.78	0.54	3.94	2.566	65.11
	CRUISE	7	94.9	0.21	3.16	1	.5	1	9.63	0.32	4.77	3.742	78.53
	"ILTIAR!	- ~	5.24	0.11	2.29	~ ~	3 "		16.6	0.20	4.26	4.195	98.47
							104.32		10.34	0.20	24.4	4.637	164.30
	LO SRND.10LE	1	32.72		-		2.41	1	•	17.7	19.0	•	0.58
	+ OBCOCKE		11.84	٥.	3	6.	23.94	1	•	3	5.9		2.66
	CKUISE	- 1-	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		30	- 0	19.21	,	•	3.7	5.0	•	2.05
	108 4AL	. 2	3.00		7.	. ~	33.70		•		æ .		3.30
	"IL ITARY	7	2.37	1.58	1.95	0.251	12.08			7	4 4	1.0	1.1
KON	LO GRND.10LE	1	74.47	5	26.5	~	3 × 3		' '	1	1		
	HI GRND . I DLE	1	8.86		7.08	1 3	•		•	•	•		
	APPROACH		7.01	5.96	94.0	604.0	6.33		5.82	3	5.34	0.334	15.7
	C-Sulst	1	09.6	1	90.6	11.		1	4.5	~	2.9		8 . 47
	NORMAL	1	16.6	-	3.12	. 78		1		3.	5.9		8.35
	MILLIANS	,	10.01	*	8.25	.68		2	4.7	·	-		6.7
	3701.0KRD 01	7	1.93	•	-	.52		7	2	0.17	0.70	0.328	4
	HI GRND. IDLE	9	7.35	•		. 93	-	9	.5	3.20	4.25	0.753	-
	APPROACH	~ :	6.23			.59	0.3	1	5.0	3.61	4.53	0.486	10.71
	2010		91.0	•		.74	9.6	7	3.2	30.6	11.64	1.067	0
	*ILITARY	, ,	7.56	66.9	8.36	0.531	11.27		18.83	13.05	15.42	1.605	10.41
204	LO SRND.IDLE	7	5	1.97	-	57	an an	1	2.08	1.13	1.63	0.310	6.01
	HI SAND.IDLE	5	6.	0.93	~	36	6.	9	1.41	9.67	1.00	25	25.69
	APFROACH	1	9.	95.0		0 4	-	1	1.38	0.31	0.81	.32	40.65
	CAUISE		9	0.28		4	0	7	2.41	37.0	1.29	.70	54.54
	MIL TIADY		70.1	2 4 5	000	577.0	55.08	,	2.85	0.80	1.51	0.841	55.65
			•		•	0		-	20.0	96.0	1.85	.20	63.48
× o×	LU SRND.IDLE	0						1	~	~	0.24	0.011	3
	ACCEPACE	3 0							~	.2	0.29	0.008	.5
	CRUTSE	o c								. 3	0.33	0.010	0.
		2							,				
	NOK MAN	C							0.62	0.59	09.0	0.010	1.67

? SCOFF ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-506-1275

REFORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0396

ENGINE MODEL : TS6-A78

TEST LOCATION : KELLY, AFB

ENGINE 5, PAGE 2

MEASURED FUEL FLOW 6 SMOKE NUMBER :

23.16 27.30 30.56 35.81 36.14 SMUKE NUMBER MEAN MIN VALUE 13.75 21.00 26.00 32.75 28.50 28.25 34-00 33-75 36-13 42-65 40-13 0085. ATTENDED FUEL FLOW - BZHR ------4 COEF 4 - 21 3 - 50 2 - 73 1 - 84 1 - 73 1 - 86 STND DEV 25.1 25.6 22.6 27.7 32.0 597 732 827 1504 1853 MIN VALUE 570 6°5 800 1470 1800 MAX VALUE 630 760 854 1556 1900 2036 080 LO SRND. IDLE HI GRND. IDLE APPROACH TEST MODE CRUISE NORMAL MILITARY

32.51 16.36 12.11 9.48 12.81

7.534 4.466 3.676 3.393 4.629

COEF

STND

-29

SCALT ELVIRONMENTAL TECHNOLOGY INC. USAF LUMBERNE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

EVELVE *09EL : 150-A78

TEST LOCATION : KELLY, AFS

SET 1492-006-1275

REPORT DATE 02/11/77 USAF CONTRACT F29601-75-C-0046

ENGINE 5, PASE 1

ANAMA CALEGORY C TESTS ONLY **** EXHAUST MASS EMISSION INDICES :

10.86 10.86 11.13 18.2 18.2 4.3 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3	E 1 15.88 1 0.36 1 0.36 1 1.62 1 0.36 1 1.73 1 1.55 1 1.55 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73 1 1.73	1	! ! !			VAL LIF	2 2 2	# COEF
ANCH 10.00 1.00 1.00 1.00 1.00 1.10 1.17 1.17	E 1 1.62 0 0 0.68 1 0.36 1 1.73 1 1.73 1 1.55 1 1.73 1 1.73 1 1.73 1 1.73 1 1.75 1				1		 770	4
HRY 1 0.68 0.68 1.73 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75	6 1 31.70 E 1 31.70 E 1 31.70 0 0.36 1 1.73 1 1.55 1 1.55 1 2.51 1 2.74 1 2.74 1 2.74 1 0.95 1 0.95			-	10.86	10.86		
1.25	E 1 31.70 3 1 0.36 1 1 5.97 1 1 1.55 1 1 3.51 1 1 3.51 2 1 3.70 2 1 3.77 2 1 3.77 3 1 7.42 1 1 2.74 2 1 0.99 0 0 99 0 0 10 0 0 1			-	1.17	1.17		
ARY 1 0.68 0.68 1 1.25 AND-IDLE 1 5.97 5.97 5.97 1 1.25 ACH 0 0 0.58 0.58 1 1 1.25 ACH 1 1.73 1.73 1.73 1 1.25 ACH 1 1.55 1.55 ACH 1 1.55	6.36 1 31.70 2 5.97 1 1.73 1 1.55 1 1 3.51 2 1 3.51 2 1 3.51 3 1 1 3.51 4 1.55 1 1 2.74 2 1 0.77 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0				
## ## ## ## ## ## ## ## ## ## ## ## ##	E 1 31.70 3 0 0.36 0 1 1.73 1 1.55 1 1.55 1 1.55 1 1.55 1 1.55 1 1.55 1 1.73 1 1.75 1			0				
MO-TOLE 1 31.70 31.70 1 18-2 ACH 0 0 1.73 1.73 1.73 1.73 ACH 1 1.55 1.55 1.55 ACH 1 0.38 6.78 1 1 15.82 11 1 1 15.82 11 1 1 15.82 11 1 1 15.82 11 1 1 15.82 11 1 1 1 1 1 1 1 1 1 1 1 1 1	E 1 31.70 3 1 1.73 1 1.55 1 1.55 1 0.38 1 0.77 1 1.40 1 1.40 1 0.99 0 1 0.59			-	1.25	1.25		
ACH NO.1DLE 1 31.70 31.70 31.70 4.3 4.4 4.3 4.4 4.4 4.3 4.4 4.4 4.4 4.4	E 1 31.70 E 1 5.97 E 1 1.73 E 1 1.74 E			-	0.71	0.71		
## 18.2 1.85	E 1 5.97 1 1.73 1 1.73 1 1.55 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95 1 1.95							
## ## ## ## ## ## ## ## ## ## ## ## ##	0 1 1.73 1 1.55 1 3.51 1 6.38 1 6.15 1 0.77 1 7.33 1 7.40 1 2.74 1 2.74 1 2.74 1 0.95				18.2	18.2		
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AGY 1 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1	1 1.55 1 3.51 1 0.38 1 0.77 1 0.77 1 7.40 1 7.40 1 0.59 0 0 0.59			0				
#0-104C	2.53 2.92 4.15 1.0.77 1.0.77 1.1.40 1.0.59 0.09 0.09 0.09			-	3.2	3.2		
## 1 2.02 ## 1 3.51 3.51 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 4.59 ## 1 0.77 0.77 ## 1 0.77 0.77 ## 1 0.77 0.77 ## 1 0.75 0.59 ## 1 0.76 0.59 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.76 0.70 ## 1 0.77 0.70 ## 1 0.76 0.70 ## 1 0.77 0.70 ## 1 0.78 0.70 #	2.51 1 0.38 1 0.77 1 0.77 1 7.43 1 7.40 1 0.99 0 0 99			-	3.0	3.0		
ACH 06.10 6 .38 6.38 6.38 1 2.02 ACH 0 0 0.38 6.38 6.38 1 4.55 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.77 1 0.77 1 1 7.40 1 1 7.40 1 1 0.55							
ACH 00 1	7.72 1. 0.77 1. 1. 0.77 1. 1. 33 1. 1. 40 1. 0.95 1. 0.95			-	2.02	2.02		
## 1.92 7.92 14.46 1 15.82 1 14.46 1 15.82 1 1 15.82 1 1 1 1 1 1 1 1 1	7.92 1 0.77 1 7.43 1 7.40 1 7.40 1 0.55 0 0 0.55			-	4.59	4.59		
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## ## ## ## ## ## ## ## ## ## ## ## ##	2.77 1 1 2.77 1 1 7.40 1 1 7.40 1 0 9.59			C				
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00-10LE 1 0-77 0-77 1 3-84 1 3	1 0.77 1 7.83 1 7.40 1 0.95			1	15.82	15.82		
0.10LE 1 2.74 7.40 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 7.33 1 7.40 1 2.74 1 0.99 0 0 0.59							
1 3.86 1 7.33 7.33 1 13.36 1 13.36 1 14.35 1 14.35 1 14.35 1 15.74 1 0.76 0 0.76 0 0.76 0 0.76 0 0.73 0 0.73 0 0.73 0 0.73	1 7.53 1 7.40 1 7.40 0 0 99 1 0.59			7	74.0	***0		
1 7.33 7.33 7.33 1 13.38 1 13.38 1 13.38 1 13.38 1 13.38 1 13.38 1 14.35 14.35 14.35 14.35 14.35 14.35 14.35 14.35 14.35	7.33 1 7.40 1 7.40 1 0.99 0 0 0.59 1 0.76				3.86	3.88		
1 7.33 7.33 1 13.38 1 13.38 1 13.38 1 13.38 1 14.35 1 13.38 1 14.35 1 13.38 1 14.35 1 13.38 1 14.35 1 13.38 1 14.35 1 1 14.35 1 1 10.57 1 1 1 10.57 1 1 10.57 1 1 1 10.57 1 1 1 10.57 1 1 1 10.57 1 1 1 10.57 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 7.33 1 7.40 1 2.74 0 0.95 1 0.76			0				
0.10LE 1 2.74 2.74 1 14.35 1 14.35 CH	1 2.74 1 0.99 0 0 9.59 1 0.76			0				
6-19LE 1 2.74 2.74 6-19LE 1 0.99 0.99 CH 0 0.99 0.99 RY 1 0.59 0.59 RY 1 0.76 0.76 D.10LE 0 0 0.25 CH 0 0 0 0.78 RY 1 0.76 0.76 RY 1 0.76 0.76 RY 1 0.78 0.78 RY 1 0	2.74 0.99 0.99 1.0.59			-	13.38	13.36		
1.57 1.57	1 2.74 0 0 99 1 0 .59			-	14.35	14.35		
CH 0.76 0.76 0.76 0.76 0.76 0.77 0.77 0.77	0.99							
CH 0.59 0.59 0.1047 0.1047 0.1048 0.1	0 0 1 0.59 1 0.76			-	1.57	1.57		
AY 1.06 0.59 0.59 0.104 0.104 0.104 0.25 0.69 0.70 0	0 0.59 1 0.76			-	0.71	0.71		
RY 1 0.59 0.59 1 1.06 1 1.06 1 1.06 0.10 0.10 0.10 0.1	1 0.59			0				
AT 1.06 0.100E 0 0.100E 0 0.25 CH 0 0 0 0 0.25	1 0.76			2				
0.10t.E 0 1 0.23 CH 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				7	1.06	1.36		
0.10t.8 0 1 0.23 CH 0.				1	1.41	1.47		
0.10LS 0 1 0.23								
CH 0.29				-	0.23	0.23		
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-	0.29	0.29		
1 0.73				0				
1 0.73				0				
				7	0.13	0.73		

P SCUTE ENVIRONMENTAL FECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-506-1275

NEPONT DATE UZZIIZZZZ USAF CONTRACT F29601-75-C-0946

424-421 : 13COM SAISN3

TEST LOCATION : KELLY, AFB

ENGINE S. PAGE 2

**** CATEGORY C TESTS ONLY ****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	. S S	XAM	NIE	MEAN	STAD	* COEF	0 0 0	XAN	ZIE	REAN	STND	# COEF
		70.00			1		0 1	100	ALOR		1	
34 40 . I ULE		575	5.75				1	20.25	29.25			
SRAD.IDLE		726	7.20				-	26.00	26.00			
RUACH	C						0					
15E	С						0					
NORMAL	-	1825	1825				-	43.50	43.50			
ITARY		1540	1940		4		1	45.25	45.25			

SCOTT ETWIRDNESHIAL TECHNOLOGY INC. USAF TUBBINE CNOTHE EMISSIONS INVENTORY ENGINE HODEL SUMMARY REPORT

SET 1492-506-1275

REPORT DATE 02/11/77 USAF CONTRECT F29601-75-C-0046

TEST LOCATION : KELLTAFB

ENGINE MODEL : FF 39

ENGINE 6, PAGE 1

ANANA CATEGORY A TESTS ONLY WARAN

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10.31	IEST MODE	. NO.	X A M	MIN	MEAN	STND	* COEF	. ON	MAX	ZI	MEAN	STND	Z COEF
		500	ALOE	VALUE		DE V	* * * *	989	VALUE	VALUE		DEV	VAF
				1 1 1 1	1 1 1 1							-	
101.		7	28.56	19.40	22.48	3.932	17.11	7	33.65	21.85	24-12	5.172	0
INTER AFD	10.1	.7	0.34	0.08	0.26	0.122	46.59	3	2 04	1 4			
NORMAL		*	0.43	0.08	0.21	0.155	71.91		30 7		2000	1.003	
MILITARY	84	*	2.34	0.07	31.0	0.134	77.77		000	66.0	7.51	1.102	1.19
TAKE - 3FF			36 0		0 0	171.0	01.30	*	4.24	0.89	2.31	1.550	67.0
						0.100	57.33	2	3.46	1.16	2.31	1.626	70.40
10.6		3	72.83	60.94	66.73	269.4	7.47	4			;		
INTERMED	£0.1	7	38.0	22 0	0			,	90.00	9.80	1.5.1	7.23	0.0
ANGON				2.0	0.0	0.00	00.	3	7.6	4.9	7.1	0.59	0.8
7 1 1 1 20	•		0.81	19.0	0.68	0.088	12.96	,	6.6	7.3	8.2	1.20	7
11111		t	0.81	3.57	0.68	0.098	14.42	#	10.2	7.2	4	1 24	
140-04		~	9.66	0.52	0.59	660.0	16.76	2	7.0	6.9	5.9	0.07	0.10
101.6		7	5.59	2.41	2.05	0.635	200			,			
INTERMED.	1 .03	,	22. 24		07 00	0000	79./1	,		2.12	3.34	0.628	18.7
NOON			21. 50	20.11	00.02	2.565	14.71	3		151.64	163.57	23.342	12.7
		,	64.10	15.57	28,36	3.037	10.71	7		269.91	341.79	46-172	1 3 5
MILITARY		7	30.69	27.16	28.52	1.554	5.45	3		339.93	361.00	23 100	10.01
ANE-OFF		2	30.50	26.60	28.55	2.758	9.65	2		237 62	200	001.00	0
								,		76.113	347.85	95.398	56.9
1001		3	3.21	90.0	0.15	980.0	39.25	1					
INTERMED.	1 .0	7	20.80	14.95	18.04	7-434	25.5			11.0	11.0	190.0	28.0
LURMAL		77	28.36	30.00	26. 21	2 0 2 3		,	120001	133.41	160.76	22.030	13.7
VALL LIAR	*	*,	20 00	23.55	10000	2000	50.21	*		260.74	303.71	43.463	14.3
TANE - DEF			30.00		20.00	119.7	10.16	#		292.35	334.51	35.457	10.6
			61.33	57.57	49.92	3.755	13.96	2	395.57	252.85	324.21	0.916	31.13
IDEE		•	3.40	2.31	2.19	0.478	17.09	3	200				
INTERMED	0.1	,	5.17	2.03	2.56	0.5.69	33 34	. :	70.00	70.7	3.17	0.562	11.1
NOPMAL		17	4.05	30.0	31. 2	0000		,	19.87	18.43	22.81	5.144	22.5
V 11 1 1 6 5 V	*			00.0			31.11	*	52.63	52.53	38.07	12.977	34.00
1 4 4 6 7 10 10 10 10 10 10 10 10 10 10 10 10 10		* 1		40.00	91.7	1-8-1	64.22	3	86.65	20.2	27.48	23.232	84.5
-		,	6.36	**	1.05	1.004	00.85	2	24.67	12.62	18.64	8.521	45.70
101.5		0							:				
INTERMED.	0.1							,	1.13	10.0	06.0	6.189	20.94
NORMA								,	36.8	2 . 4 1	7.11	1.426	20.04
Y TAIL LIM	>	0 0						7	12.21	7.42	9.60	1.989	20.11
1 4 4 5 - 0 5 6		5 0						#	12.71	7.65	10-13	2.0.52	20.05

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TUREINE ENGINE EMISSIONS INVENTORY ENGINE MODEL NUMHARY REPORT

ENGINE MODEL : TF 19

SET 1492-006-1275

REPORT DATE 02/11/77 USAF CONTRACT F29651-75-C-0546

TEST LOCATION : KELLY, AFB

ENGINE 6, PAGE 2

PODDO CATEGORY A TESTS ONLY ****

*EASURED FUEL FLOW & SMOKE NUMBER :

165T YOUE	0.00	MAX	MINVALUE	MEAN	STND	* COEF	. 00 m	VALUE	VALUE	Z	STND	* COEF
1 1 1 1 1 1 1 1 1 1	* * * *			1	1 1	1 1 1 1 1 1						1
101		1176	1099	1134	32.8	2.90	2	1.93	0.17	1.35	0.820	€0.16
1411111111	7	VU30	0678	6069	0.36	1.10	2	7.93	5.85	6.93	1 - 4 7 3	21.35
NORME	*	12370	11340	12025	464.5	3.86	2	7.36	3.93	5.64	2.425	42.97
MILITARY	đ	12835	12515	12688	133.0	1.05	2	5.14	4.80	5.00	0.196	3.96
1 AKE - 05 F	2	13385	10432	11909	2088.1	17.53	1	4.14	4.14			

iesī Locatlon : KFLIY. AFA

ENGINE 6. PAGE 1

EXMANST MASS PMISSION INDICES :

SCUTT ENVING MENTAL LECHNOLOGY INC. USAF TUDALNE FNGINE EMICSIONS INVENTURY ENGINE MOGEL SUMMARY REDORT

SALL SECT BUILDING

1.00 1.00	\$10°	VALUE	VAL JE	7 10 7 10 1 10	STND	* COEF	.0. Sac	VALUE	VALUE		STND	* COEF
72-43	1 :	+ m. e	2 6 . 20	3.20	9.433	46.59	t t	33.65	21.85		5.173	19.98
72.83	t t	4.0.6	0.97	2.0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71.91	4 4	4.85	66.9		1.702	67.73
72.83	~	9.56	11.0	0.10	2	57.11		3.46	1.15		1.426	70.48
8.81 8.73 8.69 8.83 12.95 7.3 8.83 1 1.28 8.2 1 1.28 8.2 1.28 8.3	4	72.43	26.80	66.73	4.984	7.47	1	9. A.	4.44			
7.5	*		67.9	30.6	1.854	7	J	1.6	0.00	1.0.	22.23	000
### 17.42 17.42 17.42 14.42 14.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.44 17.45 14.45 183.57 13.34 18.58 13.34 1	3 3	50 c	9.61	8 .50	H. B. S.	12.96	,	6.6	7.3	- a		20.0
7.8 6.9 6.9 6.0 7.0 7.0 6.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	1 ^	10.1	2000	900		14.42	,	18.2	1.2	8	1.24	7,5
39.59 2.41 2.35 17.42 2.561 17.42 2.44 2.72 3.34 4.628 31.49 2.561 17.42 2.561 12.65 2.561 17.42 2.561 12.65 2.561 17.42 2.561 12.65 2.561 17.42 2.561 12.65 2.561 17.44 2.562 2.561 2.661	,		76.0			16.74	٨	7.8	6.9	6.9	19.8	9.10
38.56	4	4.59	2.41	2.6.6	1.525	17.42		,	2 20	,		
38.59	, .	22.44	17.80	23.00	5.55	12.13	1 .4	243.74	151.54	3.34	A. 66.B	18.79
38.59 27.1- 28.52 1.55. 5.45 4 193.96 319.93 361.99 27.15 38.50 39.50 38.50 39.50 38.50 39.50 39.50 4.86.19 277.52 342.85 92.393 36.20 36.20 36.20 361.99 277.52 342.85 92.393 36.20	t	31.49	25.57	28.30	3.437	16.71	,	280.58	0 0 0	36.1.70	75.34	71.01
38.58 26.57 28.58 342.89 2754 448.19 277.52 342.89 32.393 8.21 8.43 8.15 8.854 39.25 4 18.54 133.21 168.75 25.393 28.68 14.95 14.64 27.43 13.54 4 18.54 133.21 168.75 25.89 25.29 34.51 25.45	10	39.69	21.15	24.26	1.554	5.45	.7	193.96	339.93	361.00	27.00	13.51
8.21 8.43 8.12 8.85 39.25 4 8.24 8.11 8.17 8.467 22.45 13.52 169.76 22.463 22.45 25.41 2.45 13.52 169.76 22.463 22.45 25.41 2.45 13.52 169.76 22.463 22.45 22.45 22.45 22.45 22.45 23.71 23.463 22.45 23.45 2	V	38.58	26.68	22.45	2.754	9.cc	Λ	449.19	277.52	342.85	92.398	26.35
28.58 14.95 18.64 2.437 13.53 4 4.45.21 133.21 168.76 22.45 28.45	7	15.8	t 9 . a	3.15	4.85	39.25	,	9 34.				
24.55 22.62 3.62 12.45 12.45 1. 24.63 2. 24.63 1. 24.63 2	t	29.58	56.51	14.04	2.435	13.54	7	T V	22.00	91.0	200.5	38.85
3.48	4	24.35	22.26	12.25	3.437	12.15	3	1	250.74	104.10	23. ASH	13.74
3.44 2.31 2.77 4.47 13.96 2.36 2.37 252.63 324.21 33.49 3.17 2.31 2.77 2.30 4.56 2.31 2.34 2.34 2.31 33.49 2.37 2.36 2.31 2.37 2.36 2.31 2.37 2.36 2.31 2.37 2.36 2.31 2.37 2.36 2.31 2.37 2.37 2.36 2.37 2.37 2.36 2.37 2.37 2.37 2.36 2.37 2.37 2.37 2.36 2.37 2.37 2.37 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38	1	マロ・エノ	56.92	54.35	129.6	4.15		36.045	297. 45	336.51	201.00	10.41
3.46 2.31 2.73 4.474 17.83 4 28.61 18.43 22.81 5.144 4.25 6.83 2.50 6.84 5.10 1.844 22.34 5.144 4.25 6.83 25.29 38.87 12.977 2.30 8.34 1.50 1.884 64.85 2 2.30 8.34 1.50 1.884 64.85 2 2.30 8.34 1.50 1.884 64.85 2 2.30 8.34 1.30 1.884 64.85 2 2.30 8.34 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32	~	54.53	57.42	26.01	3.750	13.95	A	195.57	252.85	324.21	110.1	31.13
3.17 2.37 2.50 4.569 22.34 4.562 4.502 6.61 18.43 22.81 8.562 6.71 6.25 6.83 25.29 38.87 12.977 6.263 25.29 38.87 12.977 6.263 25.29 38.87 12.977 6.263 25.29 38.87 12.977 7.30 8.34 12.02 18.89 6.30 8.34 12.02 18.89 6.30 8.34 12.02 18.18 12.40 8.34 12.40 8.34 13.24	4	3.40	2.31	2.13	4.474	68.71	,	2	0			
4.25	ţ	3.17	1.37	05.0	4.569	22.24		28.61	20.0	3.17	295.4	17.73
2.36 8.94 1.00 1.881 64.45 5 24.67 12.62 13.232 23.232 23.6 1.00 1.884 64.48 5 24.67 12.62 18.64 8.521 12.62 18.64 18.24 19.891 1.828 1.13 8.67 8.98 1.189 1.828 1.838 1	1	4.25	. H 2	3.15		31.71		0.00	000	18.00	7.144	22.35
2.35 8.34 1.55 1.884 68.45 7 24.57 12.52 18.54 8.521 6.13 8.57 8.98 4.189 4.189 4.189 6.41 7.11 1.425 6.12 7.11 7.59 18.59 9.58 1.559 1.559 6.59 18.59 1.559	•	71	0 . 3 .	2.15	1.821	R4	. ,	000	10.00	30.81	12.977	34.83
4 1-13 H-157 A-98 H-189 4 A-94 S-41 7-11 1-426 4 12-21 7-42 9-68 1-989 5 17-71 7-69 18-13 2-452 1-59		2.36	96.0	1.60	1.88.	69.85	٨	24.51	12.62	18.64	A.521	45.79
4 10.15	T							-				
4 12.51 7.42 9.68 1.989 1.089	æ						,	50	0.00	80.0	4.189	20.74
1.989 1.989 1.989 1.989 1.989 1.989 1.989 1.989 1.989	2						,		1000		1.466	50.07
694.1 55.6 46.8 87.41 4	4							12.71	7.69	10.0	686.	20.11
							۸	1 4 · 7 B	8.34	9.52	2,469	17.53

SCOTT ENVIRONMENTAL RECHNOLOGY INC. USAF TURBINE ENGINE EMICAIONS INVENTORY ENGINE MODEL STRMARY REPORT

5121-780-2551 135

REPORT DATE 81/22/75 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : 1630

LEST LOCATION : YELLY AFR

ENGINE 6. PASE 2

MEAGURED FUEL FLOW & SMOKE NIMMEN :

- 9 5 5		134° 1134° 1251°.	4 1176 1375 117 4 12438 11340 1288 4 12435 12515 1269
12862 464 3 86 12584 1 - 1 - 1 85 1 - 1 - 2 - 2 - 3	12825 464	1134" 1282" 464" 1251" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 125" 126544 126544 12654 12654 12654 12654 12654 12654 12654 12654 12654 12654 1	1134" 1282" 464" 1251" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 123" 12654 125" 126544 126544 12654 12654 12654 12654 12654 12654 12654 12654 12654 12654 1
12825	12844 12844	8792 8987 11342 12825 12519, 12684	8792 8987 11342 12825 12519, 12684

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURSINE ENGINE EMISSIONS INVENTURE FYSTYE MOUFL SURMARY MEDONE

+124-150 : 13400 3K1563

SET 1492-084-8876

JEPONT DATE BRZ28776

That LOCATION : TINCLE AFT

ENGINE 17. PASE 1

*** CATEGORY & TESTS ONLY *** EXMAUST MASS FAISSION INDICES :

\				
	Σ	67.96	1.56	
	Y V Y	57.36	1.56	15.1
1	. NO	S	2	~ ×
2 : 1 : 1 : 1 : 1 : 1 : 1 : 1	STND & COEF			
-	STAD			
AB# FUEL	MEAN			
n / 1 n	MINVALUE	65.25	7.67	12.57
Server a / Isaba FUEL	MAX	65.23	18.81 5.84	72.67
1	. NO.			5.
	TEST MODE	IOLE INTERMED. 1	INTERMED. 2	IDLE INTERMED. 1
	PARAM	Ë		90
	-			

THE THE MED. I	2 2 2 2 3				משות	* COEP
INTERMED. 1 1 2.27 INTERMED. 1 1 2.27 INTERMED. 1 1 3.49 INTERMED. 1 2.41 INTERMED. 1 2.41 INTERMED. 1 2.25 INTERMED. 1 6.26 INTERMED. 1 6.57 INTERMED. 1 1.55 INTERMED. 1 1.55	n r.c	 1) I I	d
INTERMED. 1 6.389 IDLE INTERMED. 1 72.67 INTERMED. 1 72.67 INTERMED. 1 72.67 INTERMED. 1 72.67 INTERMED. 1 6.26 INTERMED. 1 6.57 INTERMED. 1 16.57	F 80					
101E 172.67 1.88	œ					
IDLE INTERMED. 1 INTERMED. 2 INTERMED. 2 INTERMED. 3 I		- 5	4.62 8.62	0 ~		
INTERWED. 1 MILITARY INTERMED. 2 INTERMED. 1 MILITARY INTERMED. 2 INTERMED. 1 MILITARY MILITA	7	,				
INTERMED. 2 3.49 10 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.41 2.42 2.		- :		,		
DLE	•	20-				
DLE	2			, -		
INTERMED. 1 ALLITAN INTERMED. 1 INTERMED. 1 INTERMED. 1 A.54 INTERMED. 1 A.54 INTERMED. 1 INTERMEC.						
INTERMED. 2 1 6.26 IDLE 1 6.23 INTERMED. 1 6.57 INTERMED. 2 1 6.57 IDLE 1 7.15 INTERMEC. 1 8.15 INTERMEC. 1 8.15 INTERMEC. 1 8.15 INTERMEC. 1 8.15 INTERMEC. 1 1.16 INTERMEC. 2 1 1.16 INTERMEC. 2 1 1.16				-		
	4	x ~				
OLE 0.23 0.23	e:	1 73		0 1		
NTERMED. 6.54 1.15 1.6						
NTERMED. > 6.54 15.15 10.65 10.65 10.65 10.15				,		
OLC 2.18 2.18	30					
PDEC 2.18	ın					
	1					
1.65		•				
1.63	a	0				
		12.				
SOA IDLE 8						
INTERMED. 1 9						
INTERMED. > 0						
MILITARY		. v	77 6.07	. ~		

SCOTT ENVIRONMENTAL TECHNULGSY INC. USAF TURBINE ENGINE EMISSIONS TUVENTORY EVGINE MODEL SUMMARY REPORT

551 1492-088-8876

PEPONT DATE 88/28/76 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : USZ-P214

ENGINE 17. PASE 2

*** CATESIBY A TESTS UNLY ***

TEST LOCATION : TINKER AFR

MEASURED FUEL FLOW & SMOKE NUMBER :

•	* COEF		
	STND & COEF		
NUMBER	MEAN		
SMOKE	MINVALUE	8.75	
* HANDER NUMBER	VALUE	8.75 59.42 51.53	
1	NO. 08S		
*	* COEF VAN		
**************************************	MIN MEAN STNJ & COEF		
FLOW -	MEAN	!	
is. FUEL	MINVALUE	1842 3464 7465	
7 THE	MAX	12+2 5,464 7456	
	.0N .0HS		
	TEST MODE	IOLE INTERMED. 1 INTERMED. >	
		!	

SSSTE ENVIRONMENTAL TECHNOLOGY INC. USAF FURBINE ENGINE EMISSIONS INVENTORY ENSINE MODEL SUMMARY REPORT

ENSTRE 400EL : UST-4214

SET 1492-084-4876

REPORT DATE 48/19/76 USAF CONTRACT F29681-75-C-8846

TEST LUCATION : TINKER AFS

*** CAFEGORY B TESTS DALY ***

ENGINE 17. PASE 1

EXHAUST MASS FMISSION INDICES :

& COEF	Y 4 >	47.44	77.53	75 27	23.65	54.63	19.8	66.8		1.51		80.0	11.22	12.33	12.78		21.25	13.63	12.52		29.87	5.27	5.77	13.29		T. 20	29.95	4.55
STAU	DEV	5.764	3-846	1.779	8.24	20.0	4.92	2.11	2.56	2.22		9.211	4.563	6.631	9.811	200	4.593	מסוים ע	8.415		7.455	4. 3.4	8.51B	1.403		8.81S	4.296	755.9
MEAN		56.19	3.92	20.60	5.5		73.5	21.4	17.5	14.8		6.34	44.65	53.76	77.24	47.4	26.39	46.12	54.58		1.57	6.26	7.65	14.56		77.	14.4	ניייי
NIN	A P C C	49.54	2.14	1.66	2.98	,	2.89	19.6	15.1	12.2	01.0	21.2	31.15	46.48	66.32	5	31.17	39.93	57.35		1.13	5.93	7.85	8.96	;	0.10	4.61	4.85
MAX	1011	59.66	7.44	4.73	4.45	:	5.11	23.7	2.85	16.1	2 5.4	+0.0	16.64	12.40	45.31	1.42	39.65	55.32	13.12		2.41	65.9	7.98	11.59			4.81	2.52
NO.		.5	(*)		. 6		•	•	3	3) (200	٠,	3				3		• 7	3	3			-	0	~
& COEF VAH		3.88	79.88	41.99	24.44		61.5	15.21	19.61	16.44	1.62	77.7	000	7.00	65./	44.53	6.53	7.23	7.49		71.53	8.65	5.1	6.35				
STNO		1.647	4.554	#.284	9.111	20.00	1.47	. 100	4.500	3.313	A. A.36	202	0000	(30.0	451.4	9.387	0.481	4.516	N.643		1 . 31	10000	4.461	4.114				
4E A 4	1 1 1	53.44	B.71	20.00	57.00	1.5	0.0	4.15	2.13	· -	2.23	7 25	, a		***	9.76	5.13	7.14	£.5.			1.1	1.13	1.35				
MINVALUE		52.14	96.9	1.50	6.35	64.42	24.5	12.0	¥5.7	1.57	2.19	7.47	7.73		1000	1000	5.84	6.57	1.84			1.74	1.15	1.63				
MAX	!	52.55	1.37	8.75	15.6	71.75	4.64		3.33		2.26	7.63	4.72	12.41	15.01	1.88	6.54	7.54	4.84	1 7 .		1.63	000	1.44				
SHO.		m	~ (*)	£	~	~		٠.	•	•	3	•	~		'n	~	•	3	~	, -	7	-) (-	•	•	3	. 2	
TEST MODE		IOLE INTERNET		INTERMED.	MILITARY	IDLE	INTERMED.	INTERMED O		Lux 1771	IOLE	INTERMEB. 1	INTERMED. 2	MILITARY		IDLE		INTERMED. 2	TILITARY	1015	TATEGRAPH	The Course	ATT CT.OC.	TILLIAN	3301	INTERMED. 1	INTERMEN. 2	
P. A. P. A. P. C.		Ţ				00					XOX.					GN.				601					XCS.			

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTURAL ENGINE MODEL SUMMARY HEPORT

ENGINE MODEL SUMMARY REPORT
ENGINE MODEL : JST-PZIH

TEST LOCATION : TIWKER AFB

SET 1492-389-8876

REPORT DATE 88/19/76
USAF CONTMACT F296#1-75-C-884%
ENGINE 17, PASE 2

*** CATESORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

•	8 C0EF	4 1	13.41	4.13	3.58	4.25
	STND	2 1	1.607	2.363	2.179	2.598
N. JABER	MEAN		12.17	58.67	58.54	61.88
- SMURE	7 7	1	11.84	56.84	58.44	53.44
SMUKE	MAN.					
1 1 2	• 02.0		17	2	(*)	~
	* COEF		8.35	6.58	6.56	5.64
#/HH	CNTS		4.6H	369.5	422.7	438.5
FLOW - :	MEAN		1421	5598	6446	1736
IS. FUEL	MIN	!	FC6.	2340	5/00	9111
TTTTT WEAD. FUEL	VALUE	1	1163	5180	4784	3143
1	ons.		m	•	7	•
	TEST MODE		10LE	יווייייייייייייייייייייייייייייייייייי	LATERACO. >	- T-
		;				

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURSTNE ENGLISE EMISSIONS INVESTIGAT ENGINE MOSELS SHMARY REPORT

SET 1442-040-6416

REPORT DATE 88/28/76 USAF CUNTRACT F29681-75-C-8846

CHERT I TO THE ENISKS

TEST COCATION : ITAKE AFM

GOO CATEGORY A TESTS JALL CO.

FNSIVE 14. PASF 1

EXMADE WEST PRESTON INDICES :

1 28.15 24.15 1 28.15 24.1	15 27 400E	. ZC	AAN VAN	H.M.	MEAN	CNIS	* COEF	.CV	X 4 3	ZIΣ	MEAN	STND	* COEF
33.54 36.54 1 4.83 4.83 4.38 4.38 4.38 4.38 4.38 4.38		590	×40.05	***		DE.	7.00	500	VALUE	VALUE		DEV	447
53.36 53.36 5.13 5.13 5.14 5.15 5.26 5.26 5.26 5.26 5.27 5.26 5.26 5.26 5.26 5.26 5.26 5.26 5.26 5.26 5.27 5.26 5.26 5.26 5.26 5.26 5.27 5.26 5.26 5.27 5.26 5.26 5.27		-	3.12	17.75	1 1 1				28.16	1 4	-		:
53.36 53.36 5.11 5.12 5.12 5.25 5.25 5.25 5.26 5.26 5.27 5.26 5.26 5.27 5.26 5.26 5.27 5.26 5.27 5.26 5.27 5.27 5.27 5.28 5.29 5.29 5.20 5.20 5.20 5.20 5.20 6.11 6.11 6.11 6.12 6.13 6.13 6.13 6.14 6.15 6.16 6.16 6.17 6.18 6.18 6.19 6.19 6.10		2						- 3					
53.36 1-11 6-12 3-19 3-19 3-19 15-24 15-24 15-24 15-24 15-24 15-24 15-24 15-24 15-24 15-24 15-24 15-25 15-24 15-25			2 . 3 5	0.15				-	2.03	8.83			
55.36 3.12 3.12 3.13 5.13 5.14 5.25 5.25 5.26 5.26 5.26 5.27 5.27 5.28 6.28 6.28 6.28 6.28 6.28 6.28 6.28 6			4.09	6.80				-	H.5P	8.58			
1.11 3.12 3.12 3.24 3.24 3.24 3.24 3.24 3.12 3.12 3.12 3.12 3.12 3.12 3.13 3.14 3.15		-	53.	56.36					0				
1.11 3.12 3.12 3.12 3.24 3.24 3.24 3.12 3.12 3.12 3.12 3.12 3.12 3.12 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.13 3.14 3.15								- :	0.00				
3.12 3.13 3.14 3.25		-	1.1.1	11.1				s -	1.4				
2.15 2.26 2.26 2.27 2.24 2.24 2.25 2.24 2.25			9.72	0.72						2.5			
15.25 15.26 15.27 15.24 17.30 17		-	3.1.5	2.1.2					6	0			
15.26 13.08 13.08 15.09 15.00 15.00 15.00 16		*	•					- 5		14.5			
20.95 13.08 13.08 15.09 10.00 10		-	15.20	15.24				-	43.55	83.54			
13.24 15.28 173.98 173.98 173 173 173 174 16.44 16.44 175 16.44		,	54.45	56.05				-	145.09	146.49			
13.08 10.55 10.55 11.75 11			15.6	1.5.1				-	3.24	4.24			
13.98 3.42 3.42 1.73 1.73 1.73 1.74 1.75		30											
1.75 1.75 1.75 2.41 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.7			13.44	13:48					73.98	73.98			
3.42 1.73 2.41 16.94 1 16.94 1 4.38		-	α. •	10.54				-	129.25	124.25			
2.43 2.43 1 4.73 1 4.38		-	1.44	3.40				-	4.12				
2.41 2.41 16.44 1.73 1.4.38		2											
6.41 4.73 6.38			1.78	1.73				-	9.74				
		-	3.41	2.41					16.84	16.84			
		2							*	2 / 2			
		*						. 3	•	•			
									4.38	4.38			
								-	5.57	5.57			

SCOTT ENVIRONMENTAL RECHNOLOGY INC. USAF TURNINE ENGINE EMISSIONS INVENTORY ENGINE MODYL SUMMARY MEDOKI

SFT 1492-088-8876

REPORT DATE #8/28/75
USAF CONTRACT F29681-75-C-8846

ENSINE MODEL : TESSENT

IEST LOCATION : TINKER AFE

*** CATEGORY A TESTS ONLY ***

ENGINE 15, PASE 2

MEASURED FUEL FLOR & SMOKE WINNER :

 1657 VOLE	. 03. CB.S.	MAA VALUE	MEAN	MIN MEAN SIND & COEF	6 COFF	.045	VALUE	MINVALUE	ME AIN	STND	36. MAK MIN MEAN STND & CUEF OBS JALUE VALUE DEV VAP
OLE	! -	916	!	!		-	1.83	1.83	-		

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTURAL ENSINE MODEL SUMMARY REPORT

3786-500-524 138

TEST LOCATION: TIMES AFA

REPORT DATE #8/19/76

FIGURE MODEL : TRIBLED

*** CATEGORY & TESTS UNLY ***

ENGINE 16. PASE 1

EXMADST MASS FAISSION PADICES :

1	1521 MODE	.0N	MAK	Z	MEAN	STND	₹ COEF	.0N	XAY	ZIN	MEAN	SIND	* COFF
		040	VALUE	VALUE		DEV	VAR	088	VALUE	VAL 11F		740	1
****		1				1			1		-	-	
140	IDLE	3	34.63	24.87	29.74	4.888	16.41	~	31.43	25.17	27.17	3 341	13 30
	INTERMED. 1	3	12.22	01.0	0.84	2.832	21.12	~	3 3 3	1 2 45	71. 77	1 2 2 2 6 1	10.00
	INTERNEU. 2	. 1	14.55	8.23	11.31	3.164	27.99		T T	70.00	20.00	10.330	20.00
	(ILITARY	3	55.66	8.51	13.74	7.751	56.47) E	159.15	59.73	95.32	55.488	58.12
1.0	3705	•	97.54	43.59	52.58	7.849	14.85	•	4.12	4.6.1	0.7	72. 6	200
	INTERMED. 1	m	1.74	1.667	24.	A. A. D.	5					0.00	
	INTERMED. >		1.34		1.24	27.2	46. 9	2 6				21.0	71.0
	HILITAHY	*	1.14	8.16	2.5.8	8.237	26.13	n m	8.3	2.5		1.74	2.13
*07											2		
	Threewer	7.0		66.2	11.	5.7.0	X.X.	3	3.87	2.18	5.56	8.458	17.85
			7.	11.21	11.33	3.139	1.22	2	55.41	52.5#	53.69	1.258	2.35
	LATERALD. >	*	13.75	13.11	13.37	4.344	75.2	~	75.22	78.35	72.47	3.254	54.4
	TILITARY	*1	19.40	17.42	17.52	3.745	4.13	8	129.53	113,39	123,16	A. 586	66.4
9	Jake		1000	8.25	6.35	4.116	31.64	-	9.47		6. 3		3
	INTERMED. 1		19.25	20.9	36.6	1.839	24.96		40.04	30.14	75.6.7	200	200
	INTERMED. >	F	12.52	11.76	17.11	8. 184	3.17	. ~	40.4	63.47	45.61	3.575	100
	41LITAMY	~ 1	17.10	15.81	14.45	575.4	3.92	26	128.12	195.45	113.78	7.583	6.58
202	3700	0	2.57	1.25	2.4.5	4.150	6.7.	~	0 4.0	-		,	t.
	INTERMED. 1	*	106 . 41	~~	10.0	1.7.1	70.4	2.0	20.00	16.1	****	0.00	10.40
	INTERMED. >	-	1.46	700	1 27	0.00		0.0	20.00			4.334	16.11
	×11 11 AUX						C+•0.	5	1.63		2.87	2550	55.0
		,	95.3		1 - 1/	7.134	13.58	3	16.93	1.4.	9.46	1.496	18.81
Suc	TOPE	Sc.						~		3	9.74	40.4	200
	INTERMED. 1	•								1.7.	100	2000	
	TATERMED. 2	T								30	51.0		1.13
	VILITARY	*						5 17				101.	1.94
									10.00	2.23	20.0	201.0	6.73

SCOTT ENVIRONMENTAL FECHNÖLDGY INC. USAF TURBINE ENGINE EMISSIONS I TVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : IF 34-P7

TEST COCATION : TINKER AFR

SET 1452-088-8876

ENGINE 15. PASE 2

REPORT DATE #8/19/76 USAF CONTRACT F29681-75-C-8846

ONE CATESTAY & TESTS ONLY HOP

MEASURED FUEL FLUR & SMOKE NUMBER :

NUMBER	MEAN STND & COEF		2.977	2.972	2.787	2000
SMOKE HUM	MIN ME					
	*AAK VALUE			35.00	17.54	24. 53
5	0.45		3	3	3	,
3	* COEF		0.00	1.12	C5.1	3 34
44/#	STAU		7.58	53.	1144.0	244
F1.04 - #7HH	MEA		476	4777	2417	4944
130 . OFL	MIN		255	THUT	5350	2000
****** MEAS. * UF.	MALUE		1012	4525	55.37	7325
	55.5	1	•	•	~	3
	TEST MODE		iote	INTEDMEL.	INTERMEC.	41 17 AL
		:				

SCOTT ENVIRONMENTAL TECHNOLOSY INC. USAF TJASINE ENGINE EMISSIONS INVENTORAL ENGINE ADDEL SUMMARY REPORT

ENGINE WORL: IF 15-1188

SET 1492-184-8876

REPORT DATE 88/28/76 USAF CONTRACT F296#1-75-C-8846

CAR CATEGORY A TESTS ONLY 808 Traf LOCATION : TINGER AFA

ENGINE 15. PASE 1

EXMAUST MASS EMISSION INDICES :

1651 400E	NO.	144.X	N.M.	ME AN	07.15	* COEF	.0M	4 A k	ZIE	MEAN	STAD	\$ COEF
	CHS	VALUE	VALUE		DEV	VAH	988	VALJE	VALUE		05.0	× 4 >
Pole		24.22	76.22					17.21	17.71	:	-	:
INTERMEC. 1							. 3					
I :TEDMED. >	1	21.6	4.12				-	1.	88.			
MILITANY	-	60.0	6.8.9				-	8.05	9.86			
10LE	-	0.00	16.04				-	41.4	4			
INTERMED. 1	32						. 2					
INTERMED. 2	-	69.8	3.65				. ~	4.7	1.4			
MILITARY	-	8.72	4.13				-	6.6	6.5			
IOLE	-	2.33	77.				-	2.53	2.5.5			
I VTERMED. 1	*											
INTERMED. 2	-	23.83	24.43				~*	148.58	148.58			
MILITADY		59.54	29.04				-	273.29	213.29			
lote	1	3.70	6.73				-		4.5.			
INTERMED. 1	70											
	-	18.52	18.52				-	132.80	132.83			
11L I TAPY	-	25.93	25.93				-	234.43	239.88			
lote	-	2.60	2.20						35.1			
INTERMED. 1	s						- 12					
INTERMED: 2	-	2.32	6.32					15.52	16.52			
MILITARY		3.71	3.71				-	14.21	34.21			
10LE	3						-	E	3.85			
ITERMED. 1	**											
INTERMED. >	3.							7 - 1 3	1.13			
4IL ITARY							-	17.0				

SCOTT ENVIRONMENTAL TECHNOLOSS INC. USAF TORBINE ENGINE EMISSIONS INVESTORS ENGINE MODEL SUMMARY REPORT

551 1492-073-8379

** CATESTON A TESTS OLLY ***

HIST LOCATION : TINKEN AFE

USAF CONTRACT F29681-75-C-8846

ENGINE MODEL SUMMANT REPORT ENGINE MODEL : 1834-2148

FNGINE 15. MASE 2

MEASURE FULL FLOW & SMUKE MINES.

• IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ND ★ COEF	VALUE DEV VAR					
H THE	FAN SI	3					
	7 7	VALUE		1.84		26.00	24.50
	×V×	VALUE		1.84		25.00	24.58
	*0%	500		1	*		7
	* COEF	7 4 7					
	STMD	VALUE VALUE UEV VAR	1 1 1 1 1				
	14 4 1						
	2	VALUE		15.4		71111	2004
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	FST WODE			JOLE	INTERMED. 1	INTERNED. >	MILITANY

TEST LUCATION : IINCER AFA

SET 1492-084-8876

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURAINE ENGINE EMISSIONS INVENTURY FUGINE MOUEL SURMARY REPORT

ENGINE MODEL : TF38-PLAB

ENGINE 15. PASE 1

*** CATEGORY & TESTS DALY ***

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EXMAUST MASS EMISSION INDICES	
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The color The			-		7 20	182 FUEL	1 1 1 1 1 1 1 1	0				/ HR			
10 10 10 10 10 10 10 10	PARAM	TEST 400E	SC.	XAN	2 5	VEAN	STNO	* COEF	NO.	AAX	ZIE	MEAN	STND	* COEF	
18EE			SPO	VALUE	VALUE		DEV	HAY	SHO	VALUE	VALUE		DEV	× 4 >	
Victorial Vict				1	1	1					1				
Victorial Vict	4	1015	4	14.01	16.30	18.15	1.549	8.53	7	19.53	17.54	18.41	156.8	5.20	
Ulterweb		ייובאאנה.	*	(*) X) X)	12.57	3.83	3.551	67.10	3	55.68	3.61	24.64	22.419	86.86	
Ulterweight Single Singl		I STERMED.	j	35.0	1.85	5.30	2.142	72.91	7	42.56	7.46	21.13	15.420	72.98	
JULE 1916 1928 1937 1943 1946		HILITARY	7	2.58	1.89	3.63	2.430	26.19	J	51.63	10.03	56.62	18.628	62.29	
VIESMED.		Lore	**	51.00	44.77	49.42	3. 377	7.43	4	2	,				
INTERMED.		I ATE DMF D. 1	77	1.00	- 0		1 1 2		,	6.00	40.1		3.57	8.73	
10 10 10 10 10 10 10 10		- CONTROLLES		10.1	20.0	4.10	4.1.4	14.53	,	7.7	5.5	6.9	1.14	1.88	
10 10 10 10 10 10 10 10		ATT TTABLE	1	21.	0.0	20.0	8.215	26.95	,	7.9	4.3	5.7	1.56	2.72	
The part 10 10 10 10 10 10 10 1		TICLIARY	,		8 · 5 c	4.77	# 136	24.17	J	9.5	6.4	7.8	1.77	2.54	
INTERMED. I 4 17.71 15.76 15.44 7.887 4.79 4 111.62 18866 16.45 11.82 18.85 18.54 142.87 4.521 18.59 18.45 18.32 6.45 4 4.521 18.32 18.54 18.54 18.54 18.54 18.54 18.54 18.58 18.56 18.65 18.85 18.54 18.57 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.54 18.58 18.68 18.68 18.58	×	IOLE	4	2.37	2.64	27.6	192	. 73	,		0				
INTERNEGO. 7 4 21-51 18-19 19-52 19-		INTERMENT	*7	17 71	15 76		2 007	200	,		60.2	6.18	4.144	5.16	
The contract The		INTERNATION OF THE PARTY OF THE				• 0 • 0	100.	, ,	7	111.52	188.68	186.66	4.521	4.54	
INTERNEED			5	0.17	10.33	17.04	1.324	5.64	,	153.53	131.54	142.87	9.836	6.32	
INTERMED. 1		11.11.27	3	21.54	63.8]	56.44	1.793	6.77	•	251.33	219.82	241.32	15.018	6.22	
INTERMED. 1 4.48 15.89 9.769 5.18 4 99.63 89.46 95.57 4.321 INTERMED. 2 4 19.23 15.41 17.57 9.797 4.53 4 129.64 117.41 126.19 5.895 JULE		IDLE	1	46.8	77.0	0+.0	2.5	8.67	3	35.5	90	2 2 2	. 47%	200	
INTERMED. 2 4 19.23 16.41 17.57 8.797 4.53 4 22.64 117.41 126.19 5.855 J. 12.65 5 21.75 2.19 5.855 J. 12.65 5 21.75 2.19 2.29 8.883 1.755 J. 12.65 5 21.75 2.19 2.29 8.883 1.755 J. 12.65 5 21.75 2.19 2.29 8.883 1.755 J. 12.65 J.		INTERMED. 1	3	15.81	14.94	15.24	9.760			65.00		00.00	10.0	00.	
State Stat			7	0.00	16. 11	17 5.7	1000		•	10.01	27.40	15.56	4.361	4.02	
DLE				27.01	10.01	10.11	161.0	4.53	*	159.64	117.41	126.19	5.895	4.57	
DLE		4151144	2		61.10	13.37	***	6.80	4	253.97	195.52	213.88	15.665	5.95	
INTERMED. 4 1.74 1.55 1.75 4.14 6.85 4 11.39 9.88 11.89 M.888 INTERMED. 4 3.31 1.93 2.32 M.694 34.11 4.524 15.83 4.328 INTERMED. 4 3.41 2.55 3.11 M.524 15.83 4.328 INTERMED. 4 4.72 8.87 4.328 INTERMED. 4 5.34 4.526 INTERMED. 5 4 5.38 5.18 4.526 INTERMED. 5 4 5.38 5.18 4.526 INTERMED. 5 6 6 6.32 INTERMED. 6 7.17 5.68 6.18 4.716 INTERMED. 7.18 7.18 7.18 INTERMED. 7.18 7.18 7.18 INTERMED. 7.18 7.18 7.18 INTERMED. 7.18 7.18 7.18 INTERMED.	1	10.00	•	· · · ·	2.16	0.0	1.124	5.49	,	2.37	01.0	2.30	2 2 2 2	17 2	
INTERMED 2 4 3.37 1.93 2.32 4.644 34.11 4 23.97 13.86 16.67 4.879 WILITARY 4 3.24 15.87 4.324 IDLE 4 33.95 23.58 24.31 4.324 INTERMED 1 4 15.3 INTERMED 2 4 5.34 4.324 INTERMED 2 5.84 5.18 4.715 WILITARY 3 5.21 7.12 7.12 8.982		I TERMED. 1	47	1.70	1.56	5	8.141	10	*	00.11	i X	07	2 2	7 50	
MILITARY 4 3.41 2.55 3.11 4.524 16.83 4 33.95 23.58 28.31 4.328 19LE 19LE 19LE 19LE 19LE 19LE 19LE 19L		INTERMED. 2	*	3.37	1.93	2.30	649.4	34.11	7	23.97	13.86	16.67	270.	70 00	
1928 1978 9.87 3.153 19789460. 1 # 5.84 5.38 4.626 19789460. 2 7.17 5.68 6.18 4.716		41 LITAY	7	3.41	25.5	3.1	4.524	16.83	,	33.95	23.50	28.31	4.32#	15.26	
INTERMED. 1 4 5.32 5.84 5.38 4.153 1153 1153 1153 1153 1153 1153 1153	*	191.	7												
. 5.32 5.84 5.38 4.626 . 7.17 5.68 6.18 8.716 . 9.21 7.12 7.74 8.982		INTERNET							3		21.0	0 · n ·	4.153	17.58	
3.517 5.68 6.18 H.716 4. 9.21 7.12 7.74 H.982		1 .025.03.1							•)	5.32	5.84	5.38	4.626	11.52	
4 9.21 7.12 7.74 4.982		1 1 1 E 4 4 E 0							•	7.17	5.68	6.18	4.716	11.74	
		111111	,							9.21	7.12	7.74	8.982	12.57	

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURNINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

TEST LUCATION : TINKEM AFB

SET 1442-044-8876

HEPORT DATE #8/19/76
USAF CONTHACT F296#1-75-C-##46
ENGINE 15. PASE 2

ENGINE MOUEL : IF 38-P108

*** CATESTRY A TESTS UNLY ***

MEASURED FILEL FLOW & SMOKE NUMBER :

	* COEF 17.11
	51 ND 0EV 1.472 3.874
NUMBER	4.38 34.58
- SMUKE	VALUE VA VALUE VALUE VALUE VA VALUE VA VA VALUE VA VA VALUE VA VA VA VA VA VA VA VA VA VA VA VA VA
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	30 333
FLOW - #/1P	MEAN STRU + COEF OEV VAT 1417 87.2 0.56 5336 37.6 6.59 7184 141.4 1.55
# A3. FUEL .	VALUE VA VALUE VA VALUE VA VA VA VA VA VA VA VA VA VA VA VA VE VA VA VA VA VA VA VA VA VA VA VA VA VA
1 1	1480 5346 7293
1	5 8 444
	TEST MODE TOLE INTERMED. 1 INTERMED. 2 MILITARY

SCOTT ENVIRONMENTE TECHNOLOGY INC. USAF TURALTE ENGINE ENISSIONS INVENTOR OF ENGINE MOJE. CONNANN REDORT

ENGINE ALL : TENGER

ST LUCATION : TIWKER AF &

SET 1442-149-8875

NEPORT DATE 88/28/76 ENGINE 14. PASE 1

SOU CATESONY & TESTS UNLY SED

THE CH / H	10. MAX MIN MEAN STND 045 VALUE VALUE DEV	100 mm		26.4	6.71 9.71				7.5 7.5				24.13 54.73		+ 2 - 8 + 7 - 6		72.99 72.99				11.74 11.74		90.8	
	STAD * COEF DEV VAH																							
- 4 / 18 63 FULL -	MIN MEDI VALJE	1 1 1 20		6.1.3	21.3	71.54		C. W. D	1.25	67.6		11.00.0	14.81	6.33		4.87	16.0%	21.2		1	7.6.1			
	NO. MAX UNS VALUE	1 62.11		1 4.13	71.0	1 71.54		1 2.03	1 1.25	1 2.47	T	1 11.63	14.80	1 4.38	•	1 4.02	1 12.35	1 2.12	,	1.81	1.54	*,	Σ	x
	7-37 400t	101.8	I'IF-WEL. 1	1.75 mile 0. 2	12-1	Die	1.1554E0. 1	C -03460	172-1	106.5	1,154460. 1		4[-ITAGY	3701	I'TERMED. 1	FUTERMEC. 2	11.11.14.4	147	I .TESHED. I	C. CENWER. >	* 1. 1 AMY	4	1.753765. 1	

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SCOTT ENVIRONMENTAL FECHNOLOGY [VC. USAF TURBLINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT

EMPT 4 1300 SNISA 3

TEST LUCATION : TINKER AFS

FT 1472-369-8876

*** CATESSOY & TESTS ONLY 344

HEPORT DATE 48/26/76 USAF CONTRACT F29681=75-C-8846

ENGINE 14. PASE 2

MEASURED FUEL FLUW & SMUKE NINGER :

1	S COEF
	STND
*OXAREA	KEAN
- > 40KE	VALUE SA: AS
**************************************	30. MAK MIN MEAN STND % COEF 035 VALUE VALUE 1 8.75 8.60 1 28.48 28.48 1 29.41
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MEANS, FUEL FLOW - WINE	#AA WALUE VALUE OEV OEV OEV OEV OEV OEV OEV OEV OEV OE
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73. 4 .c.	ALUE VALUE RZS CZS SPERIO SESTI
ME.	820 820 820 820 820 820 820 820 820 820
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	TEST WODE TOLE INTERMED. 1 INTERMED. >
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ENGINE MONE : Triment

ELGIVE 14. PAGE 1

EXMADST MASS EMISSION INDICES :

*** CATEGORY & TESTS DILL F ***

TEST LOCATION : IINKLA SEN

		MAX	MIN	7 V 30	CNIS	* COEF	.0N	X A M	ZIE	MEAN	STAD	¥ C0F
	1001	VALUE	VALUE		DEV	VAR	580	VALUE	VALUE		DEV	VAN
1016	~	7		1 1	1							-
INT. CARE	7 6	13.50	54.10	19.29	18.9ZB	17.38	3	34.2W	45.47	55.92	6.638	12.5
1		79.0	t	15.5	8.554	10.11	~	26.21	21.24	26. 32	2000	
WIEDWED.	~	/v.x.	4.66	65.59	R. 377	91.42	~	12.47	20.35	45 33	020 87	
71111A7	e)	17.53	5.74	• • •	4.543	66.21	3	145.89	35.37	64.92	39.863	54.1
DLE	er.	78.86	9.00	75 27	12 3							
INTERMED.	. ~	177				1.03	3	9.19	58.5	61.4	2.82	5.8
INTERMED		•	3.18	3.58	4.750	51.49	3	19.2	13.1	15.6	3.18	2.0
ALL LANGE		1.07	24.7	5.0.5	4.537	21.26	3	15.1	6.6	20	2	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1.15	1.56	6.510	34.19	3	12.7	7.1	0	20.0	3
IDLE		3.66	o o	0.00								
WTERMED. 1	. ~	0.0			# · C > 4	13.64	3	2.18	1.58	1.83	A - 348	18.56
INTERMED	7 1	31.10	0.0	10.	62450	4.65	3	44.32	37.65	20.00	1.500	9
×11-11-11-11-11-11-11-11-11-11-11-11-11-	•	11.17	*****	10.44	A.634	6.57		54.63	49.35	0.1.5	720	
1011An			16.31	13.14	1,435	7 . HD		ng. 11	77. +8	91.13	6.852	7.46
loce	*	8.45	3.24	5		36. 3.0						
INTERMED. 1	8	, c	7.45	7.76	07.0		7	25.0	9.55	4.38	4.184	34.31
INTERMED. >	~	20.0	4 11	. 0		C	•	35.16	32.88	33.88	1.625	4.81
MILITARY		0.0	11 40	11.11	0000	64.	3	48.32	45.91	45.89	2.857	6.34
				1.13	77.	2.5	3	24.42	69.18	72.71	5.814	8.8
DUE		2.60	.56.	1.1.	4. 170	54 73						
INTERMED. ;	+	20.0					-	1.36	1.62	1.57	3.38R	25.44
INTERMED. >		17.						5.43	5.10	40.0	8 - 394	46.0
MILITARY	, .					1.14	3	6.44	6.31	6.48	8.875	1.17
		•		1.50	2.20	64.49	3	8.69	8.26	1.4.	9.248	2.85
IDLE	*.											
INTERMED. 1	P						~	0.71	4.64	A.60	A.036	5.39
INTERMED. >	5						~	3.64	3.39	3.49	4.134	3.85
MILITANY	2						~	4.01	3.94	3.94	4.459	1.49

DAY INC.
TECHNULUGY EMISSIONS REPORT
ENGINE SUMMARY
SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENT ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : 1F33-P3

TEST LUCATION : TINKER AFS

SET 1492-089-8876

*** CATEGORY B TESTS ONLY ***

ENGINE 14. PASE 2

MEPORT DATE 88/19/76 USAF CONTHACT F29681-75-C-8845

MEASURED FUEL FLOW & SMOKE NUMBER :

	9 4 6 6 6 6 6 6 6 6 6
	STND DEV 1.266 1.493 8.929
NUMBER	45 A B B B B B B B B B B B B B B B B B B
- SMUNE	MIN VALUE 1.68 35.68 35.78
JANNS	242 242 34.68 37.78
8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	57ND * COEF 0EV VAP 45.7 3.945 71.6 1.45 144.8 2.33
# - MOT-	4644 4361 4351 6033
MEAD. FUEL FLOW -	VALUE VALUE 193 14237 14433
A 24	444 4410E 453415 53815 53827
	TEST WODE UDLE INTERMED. 1 INTERMED. 2 MILITARY

SOUT ENVIRONMENTAL TECHNUESST ING. TEAR TURNING ENGLAR EMISSIONS LIVENIONY ENGINE AUDEL SUMMANY REPORT

FORE WIFE ESTAGE

SET 1492-184-8876

ENGINE 13. MASE 1

fest totallow : Tinger 2/3

SEE CATESTRY & TESTS DILL SES

REPORT DATE 48/28/76 USAF CONTRACT F29641-75-C-8846

: \$3010M PMISSING PADES :

TOLE TATERNEG. 1	•	MAX	225	1 D 3.	0117							i
JLE TERMEG. 1	0.00	VALUE	VALUE		DEV	VOE Y	.00	MAN	215	MEAN	STND	
JIERMEG. 1		81.13			-		0 1 0 1 0 1	VALUE	VALUE		DEV	VAR
in fromen	P.						3	82.11	82.11			•
41LiTARY		7 TH	F 17				. ~	80.0	6.50			
loce							-	4.39	4.39			
INTERMED. 1	- 1	45.85	40.73				-	H7.1	1.74			
INTERMED. >		200	6.30				x					
		1 .	1.00					11.5	13.7			
1 JLE	-	2.26	10.2									
LATEGRAPH.	180							5.25	2.25			
11.114.7		11.30					1 2 ~	74.54	78.50			
							1	91.93	91.98			
INTERMED. 1	- +	4.39	0.33				-	3.39	2			
INTERMED. >		52.5	7.73				×					
7111177	-	14.35	. 6 . 3 .				1	63.53	63.23			
17.5							1	15.4	84.51			
INTERMEL. 1	- 0						~-	1.86	1.96			
WILLIAMED.	-	1.67	1.87				z .					
1		14.0						7.34	7.38			
101.	,							1.46	7.40			
I'TE WAFE. 1	3							1.41	-			
I TENMED. 2	00.						• •	•	14.1			
* ILITARY	9							5.43	6.83			

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TECHNOLOGY EMISSIONS 1	
UNIMENTAL	
SCOTT ENVIRONMENTAL TECHNOLOSY 196. USAF TURBINE ENGINE EMISSIONS 19VFNJOAR	-

ENGINE MODEL : 157-43

21 1482-083-6576

TEST LUCATION : TINKER AFA

USAF CONTRACT F29681-75-C-8846

ENGINE 13. PASE 2

*** CATEGODY A TESTS ONLY ** JEASURED FUEL FLUM & SMOKE NIMMER :

	MIN WEAM STAD & COEF	
	STND DEV	
	AF AN	
Σ Σ	MIN VALUE	25.25
1	NO. MAX MIN WEAN STAB & COEF OBS VALUE VALUE 1 7.5A 7.5A	25.68 55.22
MEAS, FUEL PLO4 - 4742	VALUE VALUE DEV VAN VAN VAN VAN VAN VAN VAN VAN VAN VA	
D. FUEL	VALUE 1912	314.5
43h	744×	9165
	0 0 0 1	
į	INTERMED.	71.111.
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SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURNINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT ENGINE MODEL : US7-43

EXHAUST MASS EMISSION INDICES :

FEST LOCATION : FINKER AF 3

ENGINE 13. PASE 1

*** CATEGORY B TESTS ONLY ***

	TEST MODE	. O.	MAX	wIn	MEAN	ST40	* COEF	.0N	X A M	Z	MEAN	STND	00
		042	VALUE	VALUE		DEV	VAR	088	VALUE	VALUE		DEV	^
													-
1	10LE	,	H1.43	86.28	68.35	10.434	15.21	1	84.18	54.74	66.96	11.963	16.
		,	3.31	6.47	1.11	1.254	68.20	,	19.25	2.38	14.84	1.416	58
	INTERMED. >	1	- 0	8.58	1.47	6.895	68.89	1	12.52	3.71	7.28	4.263	58
	MILITARY	•,	2.21	84.0	1.43	1.587	39.58	J	17.65	5.83	11.58	4.932	45
00	JUCI	4	15.81	18.40	72.35	2.754	3.82	ı	75.7	67.3	74.8	3,44	9
	INTERMED. 1	1	7.83	65.2	2.73	A . 1 46	5.34	,	4.9	15.1	4.4	2.7.	
	INTERMED. >	1	2.21	1.92	2.05	9.127	6.28	,	4.4	13.3	13.6		
	HILITARY	•	1.66	1.51	1.59	9.962	3.84	4	13.2	11.7	12.3	6.65	
YON	TOLE	7	5.23	1.96	2.14	9.157	7.33	4	2.24	46.1	91.6	9,159	7.
	INTERMED. 1	3	9.30	7.61	8.23	9.771	9.36	3	54.12	41.25	47.80	20.0	-
	: ATEMAEU. >	4	19.68	0.86 0.86	9.45	H. KBO	4.55	4	74.85	54.18	65.69	7.010	-
	MILITARY	7	11.49	10.83	18.75	0.880	1.45	,	31.84	76.31	82.93	4.537	7
ON	1015	1	8.5.	8 • 4 3	8.53	9.117	21.93	4	4.65	24.6	55.0	9-103	19.70
		1	8.15	64.48	7.10	4.740	18.53	ţ	47.45	36.91	41.18	2000	=
	INTERMED. 2	t	5.00	1.17	H . 37	9.811	69.6	4	63.81	48.37	55.71	4.454	-
	41L11APY	,	14.94	96.8	9.15	N.837	8.54 8.54	4	43.78	18.69	15.28	6.417	6
201	101	,	1.00	1.34	1.00	612.4	13.21	3	F .	1.33	1.57	410.0	-
		•	1.33	91.0	1 . 1 .	8.235	26.73	,	7. H.O	4. 34	6.61	1.440	200
	L'ILEMED. >	1	1.13	96.9	1.00	9.107	6.89	,	81.8	5.73	7.20	1.889	5
	TELIANT	J	1.87	a €.	64.08	168.6	6.22	•	H.47	5.44	7.65	8.983	15.
×08	I JLS	no c						,	1.00	56.8	86.98	9.922	N
	TATE CARD	x (t	2.4	5.41	5.79	4.266	;
	T. ITAMEL.							3	16.5	6.10	6.65	# · 38H	.0
	THE DAY	•											

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

TEST LUCATION : TINKER AFA

SFT 1492-DBH-8876

REPORT DATE #8/19/76 USAF CONTRACT F296#1-75-C-##46

ENGINE 13. PASE 2

ENGINE MODEL : JS7-43

MEASURED FUEL FLOW & SMOKE WIMMER :

** CATESHAY IN TESTS UNLY ***

19.52 * COEF 1.752 2.327 3.482 2.287 STND 8.97 56.75 58.88 ANDRE NUMBER MEAN ALUE 6.59 54.00 57.59 2.28 4.58 5.73 3.82 8----- NEAS. FUFL FLON - #/44 -----* COEF 38.55 STNO 5773 5653 7711 MIN VALUE 949 5419 5184 (322 2000 MAK IDLE INTERMED. 1 INTERMED. 2 MILITAMY TEST MODE

- 55

#61-250 : 1300m 3M19N3

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURKINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REDOKT

IEST LUCATION : TINKER AFS

ENGINE 12. PASE 1

*** CATEGORY A TESTS DINLY ***

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	& COEF																										
	STND																										
T XT	MEAN																										
#	MIN	7007	+ / • 0 /	80.8	19.8	7 80		15.7	14.9		5.56		64.73	86.88	10.0	17.0	53.19	67.51	00	1.33	11.51	13.29		66.B		6.68	1.47
	MAX	70 7	1.00	86.0	6.67	3	•	15.7	14.8	,	5.56		54.73	86.84	4 27	7.0	61.19	67.51	000		11.53	13.29		66.8		6.64	1.47
	.00. 085	-	- 3		. –	-	- 0	- 0	. –		-	æ	-	-	-	- 3	-			- 3	-	-		_	Œ	-	-
*	& COEF VAR																										
B# FUEL	MEAN																										
# / 1848# FUEL	MINVALUE	79.13		6.15	60.0	28.82		2.38	1.87	200	0.3		x x	10.00	15.27		8.45	7.93	20.0		1.75	1.78					
	VALUE	79.13		8.15	4.97	88.88		2.38	1.87	2 37			4.00	18.00	16.0		3.65	3	2.8.5		1.75	1.70					
1	0000		• 50	-	-	7	10	7	-		•	×	-	-	-	90	1		-	2	7	7			2 "	20	£
	1FST MODE	IOLE	INTERMED. 1	INTERMED. 2	4ILITAPY	TOLE	INTERMED. 1	INTERMED. >	MILITARY				LATERAKED. >	411, ITARY	IDLE	INTERMED. 1	INTERMED. >	MILITAR	3701	I VIERMED. 1	INTERMED. 2	41LITAPY	10.6	· Objective	I STEPPED	V . C	41L11AMY
	MAHAU	146				60				*ON					9				402				¥05				

SCOTT ENVIRONMENTAL LECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT

SET 1492-089-8876

NEPORT DATE 89/28/76 USAF CONTRACT F29681-75-C-8846

ENGINE 12. PASE 2

M61-150 : 1300K ENISN3

*** CATEGORY & TESTS ONLY ***

TEST LOCATION : TINKER AFH

MEASURED FUEL FLOW & SMOKE NUMBER :

* SMUKE NUMBER	STND DEV
NUME	MEAN
- SMUKE	MIN VALUE 7.67
	×AA× VALUE 7.67
***	0 x -x
3	COEF VAR
	≠ 1
#/48	STWD & COEF
FLOW -	4E Air
D. FUEL	VALUE VALUE 995
# MEAS. FUEL FLOW - #/48	MAX VALUE 9:95 747
	. S =
	TEST MODE 10LE INTERMED. 1 INTERMED. 2 ALLIDAT

* COEF

SCOTT ENVIRONMENTAL FECHNÖLDBY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY EVSINE MODEL SURMARY REPORT

ENGINE MODEL : US/-114

ENGINE 12, PASE 1

HEST LOCATION : TINKER AFH

*** CATEGORY B TESTS UNLY ***

EXHAUST MASS FMISSION INDICES :

THE PART	20200	16ST MODE	202	MAX	чТы	MEAN	CNIS	* COEF	.0N	MAX	Z	MEAN	STND	* COEF
NTERMED 3 4.78 11.74 75.26 13.573 14.45 18.75 18.45 18.75 18.45 18.75 18.45 18.75 18.45 18.75 18.45 18.75 18.45 18.75 18.45 18.45 17.47 18.65 18.75 18.45 18.45 17.47 18.65 18.75 18.45 18.45 17.47 18.45			590	VALUE	VALUE		DEV	VAR	989	VALUE	VALUE		DEV	VAV
INTERMED 3 98.78	1111	, , , , , , , , , , , , , , , , , , , ,												-
INTERMED 3 6.48 8.45 3.19 7.884 94.25 3 8.672 2.26 17.48 17.477 INTERMED 1 8 4.94 8.45 3.197 8.45 3 1.719 3.17 18.88 7.113 INTERMED 3 2.28 8.49 8.425 8.428	THC	IDLE	3	88.78	90.19	75.28	13.574	18.85	3	82.21	56.71	78.89	12.988	18.3
INTERPRED 3 4-94 61-35 2-53 2-384 91-85 3 31-97 2-84 16-54 16-987		INTERMED. 1	3	4.48	54.0	3.19	3.884	34.25	3	36.72	2.26	17.88	17.477	98.1
DLE			12)	76.7	d . 35	2.53	2.384	91.85	3	31.97	2.84	16.54	14.987	9.86
IDLE		MILITARY	3	2.28	55.0	1.44	4.934	19.49	3	17.19	3.17	18.88	7.113	65.4
NVERMED. 1 3 3.69 3.12 3.49 8.323 9.25 3 19.6 17.9 18.7 8.85 NVERMED. 2 3 2.66 2.23 2.45 8.73 3 15.9 15.1 15.5 NVERMED. 2 3 2.24 2.12 2.17 8.85 3.23 3 44.64 37.39 13.4 13.5 NVERMED. 1 3 7.74 7.31 8.85 4.68 3 8.29 78.92 78.92 78.95 6.717 NVERMED. 2 3 9.11 0.32 8.43 4.68 3 8.59 78.92 76.51 6.885 NVERMED. 3 8.57 6.23 8.43 4.64 3 3.85 9.5 6.717 NVERMED. 1 3 8.57 6.23 8.43 4.64 3 3.85 9.5 6.717 NVERMED. 2 3 8.57 6.23 8.43 4.65 3 3.46 38.95 3.76 2.868 NVERMED. 3 8.57 6.83 8.73 8.73 8.73 8.73 8.73 8.73 8.73 8	93	IDLE		A1.14	73.85	76.44	4.283	5.50	3	75.1	67.2	12.8	4.22	6.5
INTERMED 3 2.66 2.23 2.45 8.74 3 15.9 15.1 15.5 9.49 15.1 15.5 9.49 15.1 15.5 9.49 15.1 15.5 9.49 15.5 9.49 15.1 15.5 9.49 15.5 9.49		INTERMED. 1	3	3.69	3.12	3.49	9.323	9.26	3	19.6	17.9	18.7	8.83	4. 6
MILITARY 3 1.88 1.79 1.85 6.67 3 14.1 13.4 13.8 6.35 IDLE INTERMED. 1 3 2.24 2.12 2.17 8.84 2.97 3 2.28 1.96 2.84 8.136 INTERMED. 1 3 7.79 7.37 7.51 8.297 3 44.64 37.39 48.44 3.761 INTERMED. 1 3 8.57 8.18 8.25 8.46 8 3 6.897 76.99 78.99 78.99 78.95 6.717 IDLE INTERMED. 1 3 8.57 8.28 8.148 4.143 3 8.28 8.29 78.99 78.95 6.717 IDLE INTERMED. 1 3 8.57 8.45 8.45 8.45 8.85 8.85 8.86 8.85 8.85 8.85 8.85 8.8		INTERMED. 2	3	2.66	2.23	5.45	8.215	8.78		15.9	15.1	5	3	2.1
IDLE		MILITARY	3	1.88	1.79	1.05	6.840	2.67	3	14.1	13.4	13.8	9.35	8.2
INTERMED. 1 3 7.79 7.37 7.51 8.242 3.23 3 44.64 37.39 48.44 3.761 INTERMED. 2 3 19.11 0.32 8.76 8.46 3.23 3 61.91 48.67 55.95 6.717 MILITARY 3 18.68 8.76 8.765 8.765 8.767 8.76 8.46 8.76 8.765 8.767 8.76 8.46 8.76 8.765 8.767 8.76 8.46 8.76 8.868 8.76 8.76	YON	10LE	3	2.24	2.12	2.17	9.854	2.97	3	2.24	1.96	2.84	4.136	9.9
INTERMED. 2 3 9.11 5.32 8.76 8.443 4.64 3 51.91 48.67 55.95 6.717		INTERMED. 1	9	7.79	7.37	7.51	6.549	3.23	3	44.64	37.39	49.44	3.761	6
MILITARY 3 18.58 4.56 4.56 3 82.99 78.92 76.51 6.885 100E 100E 3 6.29 5.29			7	9.11	0.37	91.8	6.443	4.64	3	16.19	48.67	55.95	6.717	12.
IDLE		MILITAPT	3	18.00	56.5	19.50	8.458	4.56	3	45.99	10.92	76.51	6.885	7.9
INTERMED. 1 3 5.29 5.47 5.49 4.214 3.46 3 35.46 34.95 32.76 2.868 MILITARY 3 14.61 5.86 3 5.53 41.61 48.63 5.53 6.53 MILITARY 3 14.67 5.61 8.461 5.86 3 54.52 41.61 48.63 5.53 8.855 10.15 10.15 10.27	01	TOLE	*	15.8	8.23	8 + 9	8.13#	41.43	3	9.56	4.21	8.41	9.189	
INTERMEG. 2 3 8.88 7.11 7.61 8.461 6.86 3 54.52 41.61 48.63 5.538 MILITARY 3 1.467 6.61 9.22 8.751 8.25 3 77.37 61.41 68.76 8.855 10.12 10.12 11.58 11.57 11.42 81.13 11.75 11.58 11.57 11.42 81.13 11.75 11.58 11.57 11.42 81.13 11.58 11.57 11.42 81.13 11.67 11.67 11.87 11		INTERMED. 1	3	62.59	15.0	60.9	4.214	3.46	3	36.86	38.95	32.76	2.868	8
MILITARY 3 18.67 6.61 9.22 8.761 8.25 3 77.37 61.41 68.76 8.855 IDLE INTERMED. 1 3 1.91 1.62 1.73 8.155 8.94 3 1.75 1.58 1.63 8.138 INTERMED. 1 3 1.21 1.42 8.133 3 1.75 1.58 1.63 8.138 INTERMED. 2 3 1.21 1.44 8.133 3 7.49 7.87 7.32 8.219 MILITARY 3 1.33 8.73 1.45 8.381 28.79 3 9.51 5.62 7.75 1.971 IDLE INTERMED. 1 8 8.94 8.973 8.333 INTERMED. 2 8 8.99 8.973 8.333 INTERMED. 3 8.79 5.87 5.37 8.333 MILITARY 8 8.79 5.87 5.37 8.283 MILITARY 8 8.79 5.87 5.87 5.79 5.89		INTERMED. >	•	8.82	7 - 11	7.61	A.461	98.9	3	54.52	41.61	48.63	6.538	13.4
FOLE 3 1.91 1.62 1.73 8.154 3 1.75 1.58 1.63 8.138 1.75 1.58 1.63 8.138 1.75 1.58 1.63 8.138 1.57 1.42 4.133 3 4.58 6.44 7.57 1.187 1.		MILITARY	•	19.61	0.61	6.55	H.751	3.25	. 6	17.37	61.41	68.16	8.855	11.7
INTERMED. 1 3 1.5% 1.42 4.133 7.33 3 4.58 6.44 7.67 1.187 INTERMED. 2 3 1.27 1.42 4.135 7.23 3 7.49 7.87 7.32 8.219 MILITARY 3 1.23 8.73 1.45 4.581 28.79 3 9.51 5.62 7.75 1.971 IDLE INTERMED. 1 2 8.79 5.37 5.47 5.37 8.333 INTERMED. 2 8 8.79 5.47 5.37 8.333 MILITARY 8 7.44 6.37 8.233 MILITARY 8 7.44 8.279	201	101.6	3	1.91	1.62	1.73	4.155	****	3	1.75	1.58	1.63	8.138	7.9
INTERMED. 2 3 1.21 1.49 1.15 4.854 5.23 3 7.49 7.87 7.32 8.219 MILITARY 3 1.33 8.73 1.45 4.381 28.79 3 9.51 5.62 7.75 1.971 IDLE		INTERMED. 1	•	1.5#	1.27	1.42	4.133	4. 13	3	H.58	5.44	7.67	1.187	7.7
MILITARY 3 1.33 P.73 1.45 4.301 28.79 3 9.51 5.62 7.75 1.971 IDLE INTERMED. 1 2 8.94 H.H32 INTERMED. 2 8 5.73 5.87 5.37 8.333 INTERMED. 2 8 F.94 6.37 8.483 MILITARY 8 8.279 8.744 6.77			3	1.21		1.15	4.854	5.23	•	7.49	7.87	7.32	9.219	3.
IDLE 10LE 10 10 10 10 10 10 10 10 10 10 10 10 10		MILITARY		1.33	1.73	1.95	4.301	28.79	3	9.51	29.6	7.75	1.971	25.4
• 1 6 8.73 5.87 5.37 8.333 8.243 8.243 8.243 8.243 8.243 8.243 8.279 8.279	×05	IDLE	•						3	86.8	36.6	76.4	W. N.32	3.4
3 5.79 5.84 6.37 8.483 3 7.57 7.13 7.44 8.279		INTERMED. 1	v						3	5.73	5.87	5.37	0.333	5.6
3 7.57 7.13 7.44 8.279			.0							61.9	5.84	6.37	8.483	1.5
		MILITARY	80						3	7.57	7.13	7.44	8.279	3.7

SCOTT ENVIRONMENTAL TECHNOLGGY INC. USAF TURBINE ENGINE EMISSIONS INVENTURY ENGINE MODEL SUMMARY REPORT

EVGINE MODEL : US7-19W

SET 1492-084-#876

FEST LOCATION : TINKER AFR

MEPORT DATE #8/19/76 USAF CONTRACT F296#1-75-C-##46

ENGINE 12. PASE 2

MEASURED FUEL FLOW & SMOKE NUMMER :

*** CATESORY & TESTS ONLY ***

	*	4EAS.	AS. FUEL	FLC4 -	#/HK	*	,	1	SMOKE	NC KREE		
TEST MODE	NO OBS	MAX	MIN	ME AN	STND	* COEF	,40. 08S	MAX	MINVALUE	MEAN	STND	* COEF
 	1		, , , , ,									
IDLE	3	186	924	240	33.6	3.57	3	11.00	14.54	18.98	9.361	3.31
INTERMED. 1	3	5734	5872	5378	333.9	6.21	6	58.80	54.58	57.73	2.875	4.98
INTERMED. >	m	6145	SASA	6373	480.5	7.54	3	51.24	58.84	86.65	1.582	S-02
MILITARY	3	7662	7132	1441	283.5	3.81	3	51.78	88.65	68.73	1.584	2.48

PEST LOCATION : TINYER AFE

ENGINE 11. PASE 1

488 CATEGORY A TESTS DALY 888

EXHAUST PLAN EMISSION INDICES :

	8 COEF																				
	STND																				
/ HW AH /	MEAN																				
n	MINVALUE	93.54	2.97	1.25	120.5	21.7	15.3	1.57	73.94	181.65	17.8	62.84	161.79	1.17		16.41	28.98	1.82		3.30	77.0
	MAX	93.54	2.87	1.25	120.5	21.7	15.8	1.57	73.94	141.65	17.6	62.84	161.79	1.17		15.31	24.98	1.02		2.00	0.00
	NO.			9 -1	-	z	s ~	-	æ -	- ·	-	× - :		-		- 0	-	-	ъ.	- 3	- ء
0	* COEF																				
	STND	1																			
# / Targa FUEL	Mr. A.v																				
4 / 13.	MIN	#H.17	96 • 36	6.15	114.24	3.75	1.87	† €	12.14	51.55	61.0	61.6	19.19	1.15	40.5		6 + + 3				
	MAX	91.84	3.36	61.13	118.24	3.75	1.87	1.54	12.74	21.55	8.78	18.00	19.19	1.15	2.64	7					
1 1 1 1 1 0		-	u → 5,	-	- 18	· 2	-	- 1	0 — v	-	- \		-		150 -	e		70 K		•	5
	7FST M00E	10.0	TENED.	FULL POWER	JOLE TEHMED. 1	ATL.CR.PAR.	FULL POWER	1 July Substitution	INTERMEC. 2	FILL POWER	TILE VICEMED. 1	TEUMEL.	FULL POSEM	10.5	T.TEUAFB. >	FAL POLER		WINTER I	S .TEUMED. 2	ALL CR. PAK.	THE PORCH
	2000	140			03			XCN			Ĉ,			402				200			

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT

ENGINE MODEL : 1F41-41

SFT 1492-089-8876

MEPORT DATE 88728776 USAF CONTRACT F29681-75-C-8446

TEST LUCATION : TINKER AFR

ENGINE 11. PASE 2

*** CATESORY A TESTS UNLY ***

MEASURED FUEL FLOW & SMOKE WIMMER :

	STND & COEF DEV VAR				
	STND				
NUMBER	MIN MEAN	1			
- SMUKE	VALUE		1.54	27.42	75.
* SMUKE NUMBER	NO. MAX		7.58	27.92	24.02
	NO.		-	- c	x
4111111111 MCDS. 1051 FLOW - 4748	* COEF				
H-/P	MIN MEAN STUD & COEF	1			
- MO74	MFAN				
3. ruEL	MINVALUE		1010	2000	1710
176	MAK		1819	5×32	6259
-	NO.		-	0 - 0	
	1FST W00E		OLE Michael	INTERMED. >	JL.CH. PWK.

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : TEAL-AL

TEST LOCATION : TINKER AFR

SET 1492-088-8976

*** CATEGORY B TESTS DULY ***

FNGINE 11. PAGE 1

EXHAUST MASS EMISSION INDICES :

					7-1/			1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	HR		
PARAM	TEST MODE	NO.	XVV	MIN	MEA'	SIND	₹ COEF	NO.	× d ×	2	MEAN	CIMI	3500 8
		083	VALUE	VALIS		DEV	242	200	31.141.	4		0.10	1000
		1 1			1			500	VALUE	VALUE		UE V	Y 4 >
THE	IDLE	5		75.33	17 60	750	100	1					
	INTOMOR	· u		-	10.01	106.11	16.85	2	51.641	76.38	93.19	12.028	12.98
	. OSTERNATION .	n (4.55	1.09	1.211	71.75	5	18.71	2.91	8.72	6.164	79.69
	NI CHARLE	n		4.26	16.9	9.432	44.13	S	CH. C	1.53	7	787	43
	41 CK. 1 8 K.	5	3.74	15.8	2.24	1.534	78.69	ı,	27.43	4.97	16.94	200	200
	FULL POWER	5	6.25	4 . 34	3.72	2.143	57.49	ic.	52.83	2.81	31.31	18.057	57.58
00	1												
0.3	IOLE	r i	122.51	115.47	119.54	2.917	5.44	S	125.8	117.1	124.3	200	200
	INTERMEN.	r)	5.14	3.76	4.62	#.553	66.11	S	26.3	7	000	2 6 6	
	INTERMED. 2	S	19.4	56.2	3.57	9.435	12.18		23.6	17.4	000	20.00	
	AIL CH. PAR.	5	2.52	1.98	2.32	8.265	11.41	n ur	0.00	3.5	2.00	25.3	71.1
	FULL POMER	(f)	1.94	1.54	1.81	8.164	88.6	ď	16.3		0.01	1.30	1.10
200								1			13.6	1.69	. a
Χ,,	TOLE	'n	1.58	1.31	1.41	8.875	5.38	5	1.52	1	1 42	000	17 7
	INTERMED. 1	'n	11.11	4.53	14.33	4.756	1.35	5	6. 64	7 4	37.1	1600	1,.0
	INTERMED. >	ď	13.57	11.54	12.51	a a	7.24	1	300	01.05	00.00	4.568	1 . 0
	MIL.CP.FWR.	5	18.21	15.87	16.99	3	50.5	n .d	22.001	113 70	11.1	2000	8.34
	FULL POWER	U.	22.40	10.01	21 21			2	163.63	110.11	161.69	7 + + + -	9.14
		,	55	14.31	10.12	1.111	25.5	2	198.85	163.36	179.11	11.173	6.24
0N	IDLE	5	8.66	B4. 9	8.63	20.80	3.78	u	9 7 6	2			
	INTERMED. 1	S	9.18	1.19	7 74	623	00 0	0 1	0 1	10.0	50· H	8.863	3.57
	INTERMED. 2	5	14.66	,	70	20.00	00.0	n	45.64	30.00	85.85	3.783	9.15
	WIL. CR. Park	5	17 11		0	4.0.4		ı.c	63.82	52.48	56.96	4.122	1.24
	7 1 100		31		66.51	121.	12.	S)	123.22	182.88	118.99	R. 389	7.56
		r	0	12.11	62.62	1.697	24.9	15	181.26	151.56	169.78	11.784	6.83
405	10LE	5	4. B.	84.9	11.8	0.80	7.63	u	0				
	INTERMED. 1	5	37.6		75	000		n i		10.4		898.A	8.64
	INTERMEC. >	5	2.01			2000	7.33	U	14.26	11.24	13.19	1.386	Br. 6
	0.00		1		000	N . 35 3	15.85	ir.	17.24	11.78	14.15	2.233	15.79
		n u	16.1	. / . 4	1.444	8.415	24.75	2	13.57	5.12	10.30	2.919	26.40
	OLL TORER	2	1.70	0.51	-1.	8.780	63.87	S	18.79	4.30	9.33	6.417	64. 50
SOX	IDLE	*											
	INTEOMEN							S	1.02	10.5	1.01	3.417	1.56
	INTERNET O							5	5.26	5.11	5.18	3.956	1.27
	21- CD 03-	ta :						5	5.91	5.74	58.5	0000	- a
	FIRE DOUGED	2						10	7.19	7.89	7.13	0 5	
	OLL FUREN	2						r	47.0	8.20	9		0.0
											4	204.0	10.

SCOTT ENVIRONMENTAL LECHNOLOGY INC. USAF TURBINE ENGINF EMISSIONS INVENTURAL ENGINE MODEL SUMMARY HEDORT

SET 1492-089-8870

REPORT DATE #8/19/76 USAF CONTRACT F296#1-75-C-#846

ENGINE MODEL : 1F41-A1

TEST LOCATION : TINKER AFB

*** CATEGORY & TESTS ONLY ***

ENGINE 11. PASE 2

MEASURED FUEL FLOW & SMOKE NIMHER :

	•		•	28.91				
	STN	DE		3.758	. 8	4.19	3.6.	2.20
NUMBER	MEAN			13.49	38.18	48.88	44.38	47.74
- SMUKE	ZΙΣ	VALUE		9.54	36.88	33.88	48.85	45.88
	MAX	VALUE		2.0	40.23	60.55	54.60	51.00
1	,0N	088		2	T.	S	(0	i.c.
8	* COEF	Y47	1 1 1 1	1.61	1.27	1.15	d.5A	1.82
#/HR	STND	DEV		16.2	65.3	67.6	41.1	HS.7
FL04 - 3	WE A:			1885	5178	5821	7134	5000
130 + OFL	ΣIΣ	VALUE		986	5116	5744	1897	6979
MEAS.	MAX	VALUE	11111	1028	5268	5912	1967	3445
	36.	580	1	5	5	J.	5	S
	TEST MODE			IDLE	INTERMED. 1	ISTERMED. 2	MIL.CR.P.P.	FULL POWER
			:					

SCOTT ENVIRONMENTAL TECHNOLOGY 19C.
18AF TURSTNE ENGINE EMISSIONS TYVESTORY
FYSTER MOSE, SURMART REDIRT

CHOINE ALLE, 1 THREAD

SET 1492-009-8876

ENGINE 18. PASE 1

HEPORT DATE 88/28/76 USAF CONTRACT F29681-75-C-8846

TEST LUCATION : HINKER AFS

** CATESONY & TESTS ONLY ***

EXMANSE MATS FAISSION PUDICES :

TOTE TO THE PARTY OF THE PARTY	NO. MAX MIN MEAN STND & COEF NO. MAX MEAN STND OUS VALUE VALUE VALUE VALUE OF VALUE	25.48		1 0.10 0.10	R • d 5	ĺ	. 1	52.7		1.69 1.69		6,45 7.63	1 142.32 187.32			1 68.87		5.0		1.26 1.25	1 1.41 1.41			
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SCOTT ENVIRONMENTAL TECHNOLUSY INC. OSAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY MERONT

ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : TF37-P7

TEST LUCATION : TINKER AFF

SFT 1492-088-8876

REPORT DATE BAZZAZZE USAR CONTRACT F29681-75-C-8846 ENGINE 19. PASE 2

*** CATESORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

- 1		0 1 1 1 1	· FUEL	FL04 -	gp/:	Miss, FUEL FLOM - s/40	1 1 1 2	1	SMUKE	NUMBER		* SHOW SER THEFT SMUKE NUMBER THEFT
• 07	Σ	A.A.	ZIE	MFAR	STA	A COEF	.0V		218	MEAN	MAX MIN MEAN STND & CUEF	* CUEF
V SHO	4	LUE	VALUE	VALUE VALUE	>30	VAV	088		VALUE		DEV	V 4 >
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_	-	1.78 1670	1670				-	26.91	16.93			
							30					
-	1	1111	7179				-	58.93	58.33			
	T	21.5	4632				-	47.98	.7.94			

ENDINE MODEL : TERREPT

SCUIT ENVIRONMENTAL TECHNULOSY INC. USER TURBINE ENGINE EMISSIONS INVENTORY ENSINE MODEL SURMARY REPORT

TEST LUCATION : IINKER AFH

ENGINE 14. PASE 1

*** CATEGORY & TESTS ONLY ***

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T. dran	TEST MOUE	NO.	Y V W	мім	MEAN	SIND	* COEF	• ON	MAX	ZIZ	MEAN	STND	♣ COE
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					1	-	1 1 1 1 1	1					-
UTI	IDLE	7	H3.B8	55.86	67.15	11.342	16.89	4	84.78	60.95	71.73	12.524	17.4
	INTERMED. 1	j	1.81	8.35	8.85	4.652	15.82	*	11.28	2.18	5.36	4.817	74.
	INTERMED. 2	1	# . 54	8.25	8.42	9.131	30.83	7	3,82	1.85	3,18	8.918	59.6
	MILITANT	ţ	4.37	+[• 9	4.39	H.876	25.65	•	3.23	1.64	2.68	8.685	26.3
	TAKE-OFF	1	9.30	9.10	42.8	A . 858	89.42	,	3.85	1.56	8.58	9.654	26.1
00	IDLE	•	93.86	81.24	19.65	2.886	3.22	7	188.8	88.4	95.8	5.34	
	INTERMED. 1	1	2.45	1.35	1.99	A.473	24.47	4	15.8	8.6	12.4	2.84	2.5
	INTERMED. 2	4	1.47	15.0	1.24	9.219	17.72	,	18.4	7.8	8.6	1.63	-
	MILITARY	1	56.8	9.60	9.88	8.167	13.39	3	8.4	5.9	7.8	1.83	-
	TAKE-OFF	4	11.8	4.5.4	9.64	4.143	16.75	J	8.8	5.5	6.3	1.15	-
¥O*	3701	4	1.5	1.00	1.85	9.112	6.17	,	2.18	1.81	1.94	9.128	,,,
	INTERMED. 1	.7	A. 42	6.81	7.43	4.857	10.87	•	56.15	42.37	25.65	5.726	-
	INTERMED. 2	3	18.14	92.0	9.13	9.868	8.85	*	73.22	63.58	14.47	4.641	6.5
	MILITARY	J	12.48	7.5.2	11.22	1.234	18.99	*	188.34	85.98	98.17	9.477	9.6
	TAKE-OFF	,	15.29	11.49	13.74	1.840	13.16	3	157.99	119.57	148.42	18.251	13.8
Or.	IDLE	3	A.62	96.0	*	N.137	32.15	,	4.74	W.32	9.46	8.166	36.16
	INTERMED. 1	*	8.12	5.43	4.01	1.31=	19.15	7	51.71	31,33	43.14	8.546	19.6
	INTERMED. 2	77	30.6	6.21	C 20 . E	1.351	15.78	3	18.81	47.58	58.49	A.482	14.
	MILITANT	•	11.67	1.35,	9.90	1.854	19.67	7	101.27	65.76	87.26	15.223	17.4
	14KE-0FF	\$	15.83		12.52	2.655	21.21	3	152.95	94.88	127.88	56.483	20.1
402	IDLE	3	1.66	1.87	1.39	7.24.7	17.74	7	1.78	1.21	1.48	8.244	16.4
	INTERMED. 1	27	1.77	9.68	1001	F.513	51.63	7	11.84	4.38	5.32	3.191	58.4
	INTERMEG. 2	1	2.84	61.0	1.85	4.542	54.43	7	15.62	5.21	7.98	5.100	63.5
	MILITARY	3	2.26	19.0	1.24	8.685	55.54	*	28.14	7.87	14.41	6.188	56.1
	TAKE-OFF	,	5.46	6.43	1.23	# 99A	81.39	•	25.57	9.38	15.62	14.394	85.3
×05	IDLE	2						•	1.88	1.01	1.23	A.378	38.
	INTERMED. 1	0						3	9.95	6.19	7.28	1.835	25.4
	1 TERMED. 2	T						*	12.25	7.84	R.43	2.546	38.6
	MILITARY	P							00 71				
								,	14.60	90.0	68.81	C. 130	51.

SCOTT ENVIRONMENTAL TECHNOLOSY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-084-8876

REPORT DATE 88/19/76 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : 1F33-P7

TEST LOCATION : TINKER AFE

ENGINE 18. PASE 2

*** CATESOOP B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NIMBER :

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TEST MODE	. ON	XAM	Z	MFAN	STAJ	* COEF	202	× av	ZIX	MEAN	STND	₹ COEF
	SHO	VALUE	VALUE		DEV	0 V >	SHO	VALUE	VALUE		DEV	× 4 >
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IDLE	J	1124	1013	1868	47.3	4.43	t	15.84	6.83	9.58	7+8+1	45.54
INTERMED. 1	1	6367	6185	6273	92.4	1.32	t	51.40	42.88	48.88	4.243	8.84
INTERMED. >	7	7562	1842	1238	263.1	3.61	5	52.44	48.85	47.63	5.258	11.02
MILITARY	1	3933	8618	8757	142.3	1.62	77	51.43	48.84	47.88	5.228	11.12
TAKE-OFF	4	14437	10015	18223	179.3	1.75	4	51.58	39.88	43.92	6.485	13.85

ENGLIE HUML : JAMES

SET 1492-004-8876

ENGINE 9. PASE 1

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PRE CATEGORY A TESTS UNLY SOR

EXHAUST 4455 PMISSION INDICES :

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	DEV																										
MEAN																											
215	· ALDE	148.58	1.13	1.20	2		1.69.1	20.5		693.6	3.45	113.86	158.19	242.18	1.42		144.46		54.67	5.43		17.73		19.29	~ ~	15.81	17.51
XAX	י ארטני	144.54	1.13	1.28	8.94		• 6 3 7	28.5	•	444.5	3.45		158.19	81.500	1.02		144.45			5.43	3	17.73		20.20	2.48	12.01	
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* COEF	:																										
STND	1																										
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ric.	70.00				7	46.39		1.24	***			16.61			6.4.9	4.12	11.55	2.47	1.4.3		0.1		1.35				
	94. 14		9.1		W.19	2	T)	1.5.	14.94	2.31		19.61			1.60	91.		3.27	1.63		7.	0	1.33				
No.	-	r,		*	-	1	s ¬	,	-	-	6.		τ.				- ~		-	9		- 5	-	v	7 1	. *	a z
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PARAM	3+1					9				×				9					705					×05			2

SCUIT EVVIRONMENTAL FECHNOLOGY 14C. USAF TURBINE ENGINE EMISSIONS INVENTURY ENGINE MODEL SHRWARY REPORT

EVGINE VONEL : JESTIT

36 1 1442-000-8876

HEPORT DATE #8/28/76 USAF CONTRACT F29681-75-C-8846

ENGINE 9. PASE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

*** CATESORY & TESTS UNLY ***

TEST LOCATION : FINKER AFF

SMUKE NUMBER	STND
RUMBER	7 d
- SMOKE	18.58 18.58 53.63
	MAX MIN VALUE VALUE 18.58 18.55 53.65 53.55 53.58
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9 WEAS. FUEL FLOW - BYMP	STND
- * 0 7 ±	MIN WAY WALSE 1498 11 16731 2 16522 5 45375
45. FUFE	1147 1241 1241 1251 1265 1265 1265 1265 1265 1265 126
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* COEF

ENGINE MOOFL : JACK PHIDA

EXMAUST MASS EMISSION INDICES :

TEST LOCATION : IINKEM AND

ENGINE 9. PASE 1

*** CATEGORY & TESTS DIVLY ***

& COEF		5.41		00.0	91.17	38.38		8.18	20.2		2			70.2	7.13	29.9	3.84		42.97	5.74	000	2.15		14.42	20.01	20.41	13.13	7.78		13.59	6.83	7.54	
STND		5.918	3 276	0007	2000	4.300		8.48	8.80	20.0	2		000	2.200	4.448	5. MB 3	4.221		4.389	2.588	2.653	2.513		7.417	1.867	000	200.0	1.711		4.311	148.9	1.174	
MEAN		189.35	3.64	000	2000	7.		131.8	23.2	19.0	17.4			100	56.34	16.56	138.73		86.8	45.11	72.85	116.58		2.68	17.24	20 00	20.00	67.73	0000	62.2	12.14	15.66	18.64
MIN	1 1 1 1 1	145.17	3.25	17.1	87			169.5	23.6	19.0	17.2		22.40	50.39	42.60	75.13	135.75		8.63	43.28	71.98	114.73		2.31	15.92	23.15		24.12	2 7 7	16.0	11.55	14.83	17.4H
MAX		113.54	3.54	2. 13	3.13			136.1	23.2	10.4	17.6		3.53	25		143.56	141.72		1.19	40.94	75.73	118.24		2.98	18.56	27.89	23 44	****	2.51	10.9	12.14	16.49	19. HB
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* COEF VAM	1 1 1	14.6	11.65	18.13	39.89		5.15	2 6.7		25.24	2.4.5		3.37	20.7.4	, o			77 77	,	2.12	1.64	1.53		00.1	9.32	11.33	7.11						
STND	100 9	166.0	7 50 . 4	9.439	8.878		S.2HQ	4 471		1000	278.2		878.0	A. 354	N. 380	0.00	200	2 2 2 2				٠. د.	01110	0.190	4.177	8.276.	4.127						
MEAN	7		2.00	3.19	8.13		96.01	2.35		0 .	0 1		2.30	7.68	64.6		01.11	40.64		2000	Ca./	4.36	,,		7.17	5000	1.79						
MIN	20.44	200	65.0	4.17	9.14		62.27	2. H.	- B 2	000	1 - 30		50.0	7.43	2.22	14.06		4.40	6.7.3	200		4.06	1.54	00.0	×	5.54	1.73						
MAX	14.77	700		77.0	3.25		84.15	2.91	**		7	100	00.0	7.93	2.17	11.34		. co	23.5	7.14		1	1	3 2 %	0.0	50.0	100						
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SCOTT ENVIRONMENTAL TECHNOLG of INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
ENGINE MOBEL SUMMARY REPORT

ENGINE MODEL : J75-P17

5-1 1492-008-8876

HEPORT DATE #8/24/76
USAF CONTRACT F29681-75-C-8846
ENSINE 9. PASE 2

TEST LOCATION : THAKEM AFS

*** CATEGORY & TESTS DIVLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

	4	13112 . FUEL	7301 · CE	FLOW - 4/14	4/4k	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SMUKE	NOME		•
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	083	VALUE	VALUE		OF	V A V	CBS	VALUE	VALUE		DEV	VAY
	1 1	1 1 1		1 1 1 1	1 1 1 1		!!!!					
IOLE	2	1751	1479	1525	65.1	4.27	N	15.84	13.58	14.25	1.861	1.4.7
INTERMED. 1		1989	1967	8114	207.4	6.56	a	49.54	48.18	48.84	A.0. H	2.83
INTERMED. 2	1	14642	16 314	1845	263.6	£6.1	1	58.83	41.89	53.58	9.192	17.13
MILITARY	~	12444	12498	12441	75.	9.60	^	53.54	49.65	49.75	1.051	2.13

SCOTT ENVIRONMENTAL FERMUNDLUST INC. USAF TURHINE FYGINE EMISSIONS TWENTOUT ENSINE MODEL SIRMANDY REPORT

** I - SIT I THE PM BRIDGE

EST LICATION : TLAKE!

8. PASE ENGINE

% COEF VAR 36-17 38-47 33-56 42-53

9.32 9.21 1.17 1.45

5.22 11.88 3.15 2.77

18.91 15.76 5.84 3.35

4.67 8.32 12.18 33.73

4.111 1.227 8.333 8.208

2.53 13.82 19.87 21.74

2.43 12.55 18.78 21.56

2.45 15.48 19.34 21.97

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INTERMED.)

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*** CATES 12Y B TESTS UNLY ***

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1		VALUE	VALUE) F	700	560	VALUE	VALUE		DEV
		54.21	24.83	38.15	14.859	36.84		45.43	46.44	50.00	21.807
		4.10	T	9.52	W.154	31.48	6	6.54	3.79	70.0	1.748
		24.6	6-53	. s.	8.838	31.77	2	5.11	2.73	3.71	1.250
	0	4.34	6.15	8.50	A-127	42.45	3	5.21	2.07	68.5	1.75#
	3	67.65	34.85	62.02	7.453	11.42	3	184.3	89.6	98.9	8
	~)	3.50	3.89	3.23	A . 255	7.76	(**	29.0	27.9	28.3	25.5
	3	2.03	1.66	1.05	4.216	11.23	8	25.1	200	22.2	2.61
	•7	1.69	1.23	1.47	8.202	13,72	'n	23.2	17.5	8.	2.90
	3	20.0	2.48	2.00	4.864	64.5	•	4.29	3.91	4.85	112.9
	•	6.96	65.9	11.5	8.243	3.66	. 6	64.39	58.95	54.61	2.0.0
	*	¥	8.55	10 t	4. 149	3.88	~	119.15	193.42	186.76	3.365
	•	14.03	14.16	18.	3.336	3.21	(*)	147.42	139.53	142.53	3.943
	~	13.8	0.37	2	F. 88	17.45		8.45	4.58	9.73	95139
	~	5.51	4.79	5.14	2.35.	1.42	2	51.71	37.50	46.55	7.886
	~	7.85	6.93	1	7.439	5.87	3	34.30	84.53	88.45	5.163
	m	9.80	44.6	50.	0.212	2.85	6	1 12.94	124.92	159.98	4.351
	-	5.11		6.63		z.	7	3.44	3.17	1.31	9.135
	~	1,71	1 . 15.	1.33	502.1	12.90	~	14.90	12.68	13,55	1.136
	3	1.73	1.32	1.54	9.23×	13.41	60	28.14	15.84	18.38	2.229
	7	1.14	4.57		4 320	34.61	~	16.43	7.85	12.64	4.262

SCOIT ENVIRONMENTAL TECHNOLGAY ING. USAF TURBINE ENGINE EMISSIONS INVENTURY ENGINE MODEL SURMARY REPORT

ENGINE MODEL : J75-19W

35T 1492-DA8-8876

HEPORT DATE 88/19/76 USAF CONTRACT F29681-75-C-8846

ENGINE 8. PASE 2

** CATESSOY A TESTS ONLY ###

TEST LOCATION : TINKER AFB

MEASURED FIREL FLOM & SMOKE NIMMER :

•	* C0EF	× 4 ×		2.61	0.00	2	4.12
	STND	V3C		4.577	2.291		2.121
NUMBER	MEAN		*****	14.67	47.84	51.88	51.50
SMUKE SMUKE	2 5	VALUE		4.0	20.00	53.69	58.00
	MAX	VALUE			43.58	32.44	53. MA
1	NO.	088	1	7	~	3	2
*	3 COEF	747	11111	4.35	68.1	1.73	96.9
#/17	GNIS	V30		6.8.4	768.4	247.1	36.
FLOW - #	MEAN			1084	8644	11936	13604
730 4 · C	414	VALUE		1520	7851	11700	13498
4EAS.	MAX	VALUE		1691	5985	12497	1 374 1
	.04	OHS	1 1	~	~	3	٣.
	1651 400E			IDLE	INTERMED. 1	INTERMED.	MILITARY

SCOTI ZUZIFONMENTAL IECH FOLGGE INC. USAF TURBINE ENGINE EMISSIONS INVENTIORY ENGINE MOSEL SCHMARDY REGGET

Entered at 1 Terror Extension a

FEST LUCATION: : HAMER AND

SET 1492-188-8876

*** CATESTICY A TESTS UNLY ***

ENGINE 7. PASE 1

USAF CONTRACT F29641-75-C-8846

EXMANST 4255 E415STON INDICES :

₹ COEF																									
STND	DEV																								
MEAN																									
ZΙΣ	VALUE	H . CF		4.13	5.55	7.47	•	17.4	16.5	,	90.0	2.	74.57	05.8	,	42.63	65.50	1.67	•	11.15	13.41	1. 4		8.31	33
XAX	VALUE	142.18		4.73	5.56	74.7	•	17.4	16.5		00.0	B C	78.57	55.8		42.25	45.56	1.77		11.15	13.01	1. 31		9.31	2. 2.7
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¥ C0EF	7 4 >																								
5740	DE V																								
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21%	VALUE	10.00		***	# 15	43.93		16.2	6.24	20		5	10.65	0.4.8		11./	00.40	1.5.7		1 . MH	1.76				
MAA				50.0	6.75	13.43		5.63	5.24	2		86.8	18.65	20.0		7.11	40.0	1.57		1. A.	1.76				
	(12)		*	~			£	-4	-				-	-	0	-	~		0		-	7	9	52 1	11
TE 21 4400E		1 16.5	1 .03MEG.1		VILITARY	Lote	I . I SAME D. I		J.LITAPY	-	. Transfell.		*ILITAPY	7.7.	INTERMED. 1	ATERMED. >	MILITAMY	2.4.5	I .TE SMED. 1		41. ITARY	42	1.15.2450.1	INTERMED. >	11.11.11.11
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SCOIT ENVIRONMENTAL	USAF TURBINE	7
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	q.	4
4	W	7
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ENGINE MODEL : 1F 33-P3

LEST LUCATION : TIMER AFA

Srf 14,52-189-0876

ENGINE 7. PASE 2

USAF CONTRACT F29681-75-C-8846

** CATESONY & TESTS UNLY ***

MEASURED FUEL FLOW & SMOKE NINGER :

	& 1 0 A 1	
	STND % COEF	
NUMBER	Σ Δ Δ	
- SMUKE	413 VALUE 13.58	54.50
B SMOKE HUMBER	MAA MIN MEAN VALUE VALUE 18.58 18.58	24.08
1 1 2	0 x 1 -x-	
7	4 1 3 1 0 3 1	

- 1072	MEAN STRUG	
AS. FUEL	VALUE 135 135	
30	4 ALUte 938 7375	
1		
	IEST MODE INCENTOR I I I I I I I I I I I I I I I I I I I	

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURAINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT

14-61: 1300m 341513

SET 1492-008-8876

TEST LOCATION : IINKEM AFR

ENGINE 7. PASE 1

HEPONT DATE 88/19/76 USAF CONTRACT F29681-75-C-8846

EXMAUST MASS EMISSION INDICES :

*** CATEGORY & TESTS UNLY ***

SCUIT ENVIRONMENTAL TECHNOLOGY INC. USAF TURHING ENGINE EMISSIONS INVENTURY ENGINE MODEL SUMMARY REPORT

SET 1492-088-8876

REPORT DATE 88/19/76 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : 1F33-P3

ENGINE 7, PASE 2

TEST LOCATION : TINKER AFB

*** CATEGORY R TESTS ONLY ***

MEASURED FUEL FLUW & SMOKE NIMBER :

•	200 V COEF
	51 ND DEV 3.894 3.544 5.282 5.982 3.924
NUMBER	15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- SMOKE	MIN VALUE 18.58 53.88 51.88 54.58
-	4 4 A A A A A A A A A A A A A A A A A A
	0000
#/HR	STND * CDEF DEV VAR 17.2 1.92 12.4 5.49 119.2 1.58
ELO# - #/	5112 5276 7441
FUEL	MIN VALUE dat 4758 5791 7213
MEAS.	747. VALUE 921 5588 7558 8881
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	TEST 40DE IDLE INTERMED. 1 INTERMED. 2 MILITARY TAKE-OFF
	1

SET 1492-009-1276

REPORT DATE 01/16/77 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : FLUC-PAIDO

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENSINE EMISSIONS INVENTORY FYGINE HODEL SUMMARY REPORT

TEST LOCATION : LANGLEY AFB

ENGINE 18, PAGE 1

*** CATEGORY A TESTS UNLY ****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MAX	VALUE	MEAN	STNO	Z COEF	0 0 0	MAX	VALUE	MEAN	STND	Z COEF
JHC	TOLE	r :	5.95	2.74	2.84	0.148	5.22	2	4.10	3.90	4.03	660.0	2.4
		5 M C	0.16	0.02	6.08	0.074	96.14	0 7	0.86	90.0	9.37	0.427	116
	ALLIARY	7	0 - 36	0.13	61.0	0.233	119.66	2	3.68	0.30	1.99	2.390	120.10
00	IDLE INTERMED. 1	N 0	54.69	23.40	24.04	0.912	5.19	2	34.3	33.8	34.0	0.35	
	INTERMED. 2	M	2.26	1.13	1.77	0.581	32.17	J 80	1.1	9.	7.0	66-0	1.40
	111111111		0.93	0.85	68.0	0.057	6.36	2	9.5	9.9	9.6	0.64	0.
XON	IDLE INTERMED. 1	~ €	3.37	3.30	3.33	640.0	1.48	2	4.87	4.59	4.73	6.198	4 . 19
	INTERMED. 2	m	11.61	7.47	9.22	2.289	28.47	o *			•		
	MILITARY	۲.	26.87	26.51	26.69	0.255	0.95	2	276.79	270.42	273.60	405.4	1.65
200	IDLE INTERMED. 1	NO	1.41	1.33	1.37	0.057	4.13	7		1.85	1.94	6.127	6.56
		3	96.6	0.15	7.57	2.084	27.55	n ~	2.3 2.0	3.0	:		
	HILITARY	2	22.86	22.50	22.68	0.255	1.12	2 23	233.17	251.73	232.45	1.018	51.24
20%	IDLE INTERMED. 1	N 0	1.07	1.96	1.16	0.007	U. 36	~	2.84	2.14	2.19	0.071	2.53
	INTERMED. 2	3	1 . 94	1.32	1.65	0.287	17.39	J ~	69.6	07 70	1 08	137 6	, ,,
	MILLIARY	7	4.37	3.65	4.01	0.509	12.70	~	45.06	37.25	41.15	5.523	13.42
× o s	IDLE INTERMED. 1	0.0						~	2.00	2.50	2.55	6.071	2.17
		0.0						5 m	55.6	4.00	6.06	2.939	48.37
								2	18.34	12.35	15.36	41 6 11	23.

27.60

2.939

6.08

12.35

9.44

SCOTT ENVIRONMENTAL TECHNOLOBY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

SET 1492-DU9-1276

USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : F136-P4100

TEST LOCATION : LANGLEY AFG

**** CATEGORY A HESTS ONLY ****

ENGINE 16, PAGE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

•	COEF VAR
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STND
NUMBER	X X X X X X X X X X
SMOKE NUMBER	MIN VALUE 4.80 23.92 26.84
	4.80 23.92 26.84
*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
*	2.74 23.22 0.69
ZHR	51NB 0EV 38.5 973.7
FLOW - A/HIR	жЕ А м 1418 4193 10250
MEAS. FUEL	MIN VALUE 1390 3333 10200
# **	MAX VALUE 1445 5250 10300
*	, 680 1022 1028
	TEST MODE 10LE INTERMED. 1 INTERMED. 2 MILITARY

SCHIT ENVIRONMENTAL FECHNOLOGY INC. USAE TUBBLINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SURMARY REPORT ENGLIS ADSE : FLUB-CALSA

EXMANS! MASS PAISSION INDICES :

TEST LOCATION : LANGLEY AFA

ENGINE 18. MAGE 1

**** CATEGORY A TESTS ONLY ****

MAMAG	TEST WUDE	.00	Y V Y	218	MFA	STND	* COEF	. O. C.	MAX	NIE C	MEAN	STND	* COEF
		SHO	VALUE	VALUE		0EV		Y 1	VALUE	VALUE		1 1 1 1 1	7 1 7 1
	100.6	ď	0.10	2.83	3.64	1.686	45.81	5	7.32	2.84	5.83	1.941	38.57
	INTERMED. 1	3	4.	8.13	4.29	9.115	38.97	ır	1.47	8.42	96·H	3.386	44.61
	INTERMEC. >	U"	A - 37	4.33	7.17	9.137	83.55	5	1.92	8.43	2.00	A.718	41.64
	MILITAGY	ď	3.64	52	A . AM	664.6	64.641	10	2.87	3.114	9.84	9. H.9.6	186.57
	IDLE	5	38.34	19.51	24.39	4.211	17.26	S	34.6	29.3	33.9	3,92	1.16
	INTEDMED.	ır	3.33	1.63	7.43	2.635	24.36	5	13.8	5.3	8.3	1.96	2.40
	INTERNED. 2	50	1.17	60.0	1.85	468.8	9.83	tr	6.3	1 . Ω	5.5	9.54	66.0
	4ILITAPY	S	75.4	6.63	8.48	A-125	15.52	U	6.3	9.9	R.3	1.89	1.32
	Lote	ıs	3.54	3.21	3.35	9.163	5.84	· ·	5.37	3.89	4.79	4.561	11.93
	INTERNED. 1	5	7.80	6.55	61.14	4.217	3.23	3	22.74	21.33	55.26	H. 68H	2.73
	C . JANGAIT.	1371	12.21	200	11.22	9.799	96.9	ď	67.15	48.24	50.27	4.976	11.77
	HILITAGY	50	34.65	23.46	26.66	2.176	17.41	u	323.45	232.04	277.70	41.778	15.84
	10.5	r	1.1	2.00	44.	4.36 2	28.82	ın	2.72	1.26	2.84	1.553	27.15
	INTERMED. 1	r	5.15	5.67	5.45	4.284	3.44	io.	20.00	18.44	19.51	4.641	3.29
	INTEDMED. 2	ın	12.93	S. H. 9	16.0	0.77.0	7.82	5	68.13	45.56	52.74	4.528	12.43
	AILITAPY	r,	26.81	20.47	23.14	2.623	11.22	5	284.23	242.49	243.67	34.177	15.67
	101.	ru.	2.13	1.77	1.12	9.166	2.4	w	E T 0	2.53	2.67	2.11.	4.14
	INTEDNEC. 1	ur	0, 3	8.68	4.00		17.64	5	3.17	2.27	2.74	2.333	12.14
	INTERMED. >	0	. 44.	1.00.1	1.25	1711	13.73	100	8.42	5.25	4.57	1.449	15.17
	*ILITAHY	'n	3.66	7. ×1	12.57	4.331	10.13	(n)	34.42	28.66	34.82	4.835	14.21
	INLE	2						u	2.61	1.97	14.6	x . 2 x B	11.95
	INTEGATO. 1	7						ıſ	20.9	5.54	5.64	5.485	7.14
	INTERMED: 2	8						LO.	9.71	9.39	9.05	4.623	5.83

SCOTT ENVIRONMENTAL TECHNOLOGY 14C. USAF TURBINE ENGINE EMISSIONS INVENTURY ENGINE HODEL SUMMARY MEDGRI

ENGINE MODEL : Fled-Palza

SET 1492- DIO-1276

JOSE COMTHACT F29641-75-C-4446

ENGINE 18. PASF

TEST LOCATION : LANGLEY AFR

SERES CATESCONY OF TESTS ONLY BREEF

AF SURED FURI FLOW & SMOKE NIMMER :

TEST YOUE

-- SMUKE WENER ---2.5547 2.081 1.388 5140 06V 34.52 ME EN 4.8 H MAX VALUE 28.23 35.54 35.78 200 088 088 444 Services WEAS, FUFL FLOW - min -----

277.5

1484 3248 5278

7ALUE 1597 3359 5587

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SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENCINE MODEL SUMMARY REPORT

ENGINE MODEL : TF34-100

EXHAUST MASS EMISSION INDICES :

TEST LOCATION : S.E. LYNN

SET 1492-014-0177

REPORT DATE 62/08/77 USAF CONTRACT F29601-75-C-0046 ENGINE 20, PAGE 1

P### CATEGORY A TESTS ONLY ****

THC IDLE INTER		085	VALUE	VALUE	2	STND	2 COEF VAR	NO.	VALUE	NIN	MEAN	STND	**
NA		~	29.09	29.09		-	1 1 1 1 1 1				1.	DEV	i
	APPONACH	0.						- 0	11.20	11.20			
כאר	CRUISE		3	4.0				, ,	0.43	0.43			
MAX	MAX.CONT.PHR		0.05	90.0				1	0.12	0.12			
TAK	TAKE -OFF	0						-	0.12	0.12			
HAX	MAX.REDLINE	7	0.03	0.03				0 -	:				
101	i.e.							•	71.0	0.12			
INI	INTERMED. 1	٠, ٥	104-36	104.36				-	6.04	0			
APP	APPROACH	o -	11.00					0		7.04			
CRUISE	ISE		11.90	11.96				-	11.0	11.0			
×	MAX.CONT.PER	. ~	20.0	20.0				-	5.4	1			
IAK	TAKE-OFF	. 0		55.33				-	5.7	5.7			
MAX	MAX. PEDLINE) - -	1.92	1.92				0					
				74.1				-	6.9	6.9			
STC1 YON		1	2.01	2.01									
INTE	INTERMED. 1	O						-	0.77	11.0			
A P P P	APPROACH	1	5.40	5.40				0					
CRUISE	St	7	7.24	7.24				-	4.95	4.95			
WAX.	MAX.CONT.PER	7	9.75	9.75				7	10.85	10.85			
IANE	TARE-OFF	0						1	23.84	23.84			
X V I	MAX . REDLINE	-	11.43	11.43				٥.					
								-	41.20	41.20			
INTER	INTEGNED	- (0.08	0.08				,		;			
0004								• 0	00.0	0.03			
371100	200	- .	3.78	3.78				- 0	2 11.7				
	MAX CONT D.D.	٠.	5.78	5.78				• -	15.0	2.47			
TAKE	TAKE-OFF	- c	8.02	8.02					19.60	10.0			
X X X	MAX . REDLINE	o -	63					0		00.71			
			1.33	4.53				1	34.35	34 - 35			
NOZ IDLE		-	1.02	. 0									
INTE	INTERMED. 1	(2)		7				7	42.0	0.74			
APPROACH	OACH O	1	1.61	1.61				0					
CRUISE	SE	1	1.45	1 45				-	1.48	1.48			
. XAY	MAX.CONT.PER	-	1.77	1.73				1	2.18	2.18			
TAKE - OF F	-0FF	0						-	4.24	4-24			
MAX.	MAX . REDLINE	-	1.90	1.90				0					
								-	6.85	6.85			
TOLE		0											

1.10 1.10 1 1.80 1.80 1 2.93 2.93 0 4.32 4.32

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INTERMED. 1
APPROACH
CRUISE
MAX.CONT.PAR
TAKE-OFF
MAX.REDLINE

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SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENGINE MODEL : 1534-100

SET 1492-014-0177

REPORT DATE 02/08/77 USAF CONTRACT F29601-75-C-0046

ENGINE 20, PAGE 2

TEST LOCATION : G.E. LYNN
***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

•	* COEF
SHOKE NUMBER	STND
NUMBER	H E A A
- SMOKE	MIN VALUE 3.67 1.79 2.25 9.79
	MAX 3.67 1.79 2.25 9.79 20.21
*	0 0 0 0 0 0 0 0
*	Z COEF
MEAS. FUEL FLOW - #/HR	STND
FLOW - 1	Z Q
S. FUEL	MIN VALUE 385 917 1499 2445 3606
MEA	MAX VALUE 385 917 1499 2445 3606
-	000
	IEST MODE IDLE INTERMED. 1 CRUISE MAX.CONT.PWR HAX.REDLINE
	1

SCOTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

REPORT DATE 02/08/77 USAF CONTRACT F29601-75-C-0046

SET 1492-014-0177

9,00-0-5/-109621 10

ENGINE 2C, PAGE 2

ENGINE MODEL : TF 34-100

TEST LOCATION : G.E. LYNN

**** CATEGORY C TESTS ONLY ****

**** CAILE 50KY C

MEASURED FUEL FLOW & SMOKE NUMBER :

#	MEAS. FUEL	EAS. FUEL	FLOW - # /HR		•	*		SMOKE NI	NUMBER		
. ON	X A H	z	REAN	SIND	\$ COEF	.0N	E X	Z I	HEAN	STND	1 COEF
088				DE V	VAR	580	VALUE	VALUE		DEV	< > >
	'	•				1					
1	381					-	2.88	2.86			
1	438					1	1.13	1.13			
1	918					-	05.0	0.50			
1	1491					-	0.25	0.25			
1	2569					-	7.75	7.75			
TAKE-OFF 1	2836					-	9.50	9.50			
1	3232					•	14.63	14.63			

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SCULT ENVISORMENTAL TECHNOLOGY INC. USAF TURBIAE ENGINE EMISSIONS INVENTORY ENGINE MODEL COMPARY REPORT ENGINE MODEL COMPARY REPORT ENGINE MODEL : 17 34-100	SET 1492-614-0177 E FAINT INVENTORY USAF CONTRACT F29601-75-C-004-6	TEST LOCATION : 6.F. 1 KNN
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ENGINE 2C. PAGE 1

SASSE CATEGORY C TESTS ONLY ****

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		088		VALU	⋖	ZW	Z COEF	NO.	MAX	MIN	MEAN	STAD	Z COEF
702444	100.5	-	28.04	28.04	1				1		-		-
402 - 1	INTEDMED. 1	7	16.82	16.82				٦.	10.68	10.68			
2 4 4 4 0 5 1 4 5	APPACACH	7	1.06	1.06				٠.	1.37	7.37			
विवेच ह	CRUISE	-	0.31	0.31				٠, .	16.0	0.97			
4 1	*AX.CONT.P.R	-	0.26	0.26					97.0	94.0			
7	TAKE-OFF	1	0.10	0.10				-	19.0	0.67			
	MAX.REBLINE	-	0.08	0.08					0.28	0.28			
3 11.11	u												
	INTERMED.		107.24	107.24				7	6.04	6.04			
304		٠, .		80.98				1	35.5	35.5			
ā	2001	٠.		16.63				1	15.3	15.3			
NA.	MAK. COMT Puo	٦.		4.58				-	8.9	3.9			
44	TAKE-DEF	٠, -	2000	2.51				1	6.1	6.1			
447	AAK GERGI TRE	٠.	01.7	2.10				-	6.2	6 . 2			
	11.17.7.1.1	-	76.1	76.1				7	6.2	6.2			
NOX IDLE	14/	1	2.15	2.15					6				
IN	INTERMED. 1	1	2.70	2.75					78.0	78.0			
11.14	AUPROACH	1	6.52	6.52				٠,	1.16	1.16			
24.5	381043	-	8 . 32	2. 3				٠.	56.5	5.99			
XAX	MAX.COLT.P.R	-	10.81	10.81				-	12.41	12.41			
TAL	TAKE-OFF	-	11-11	11.11				-	21.17	27.77			
XAX	MAK. PEDLINE	1	12.04	17.04					51.50	31.50			
								1	38.93	38.93			
No IDLE	la.i	1	0.00	0.09				•	2				
7	INTERNATIO. 1	1	0.12	0.12					200	200			
APO	APPACACA	1	4.32	4 . 32									
7 7 7	CAUISE	-	6.64	6.64									
X A F	TAK CON L. P. P.		8.87	8.87					12.78	22 78			
4 - 2		-	9.13	9.13				1	25.89	25.30			
	144. TO L. 14E	4	10.01	10.01				1	32.55	32.55			
NG2 IDLE	i i	-	2.06	2.06									
INI	INTERMED. 1	1	2.58	2.58				-	61.0	0.75			
407	APPHOACH	7	2.20	2.20				-	1.13	1.13			
CRU	CRUISE	1	1.68	1.66				•	2.05	2.05			
X W >	*AX.CONT.PWR	1	1.95	100					2.50	2.50			
TAN	TAKE-OFF	1	1.98	86.1				-	2.00	5.30			
7 4 >	*AA. RECLINE	1	1.97	1.97				٠.	29.62	20.5			
									80.0	9.30			
201 101	.,	0						-	0.23	0.23			

0.26 0.26 0.55 0.55 0.89 0.89 1.54 1.54 1.70 1.70 1.94 1.94

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INTERMED. 1
APPROACH
CRUISE
MAX.CONI.PmR
TAKE-OFF
MAX.REDLINE

37

SCUIT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENGINE EMISSIONS INVENTORY ENGINE MODEL SUMMARY REPORT

ENEINE MOJEL : TF 34-100

TEST LOCATION : G.E. LYNN

SET 1492-014-0177

NEPORT DATE 02/36/77 USAF CONTRACT F29601-75-C-0046

ENGINE 2C, PASE 1

SESTS ONLY SESTS ONLY SESTE

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MOLF	-					*			4	2 1		
		.00	MAX	MIN	NATA	CIAD							
		088	VALUE	VALUE		2000	COEF	.0N	× W				
0 41	130 6					,	~ ×	085	VALUE	21.47	Z	STND	\$ COEF
	NI SORTO	5	43.35		34 - 74			-	1	20 1		DE v	*
	A DE DO S CO.	2	23.42	16.03	20.34	,	95.42	5	17.00	0	1		
	HOACH	9	1.75	0.85	02.02		13.17		200	7.50	13.32	3	24.
	CRUISE	5	0.41		1.18		58.88	1 3	70.01	1.02	9.27		1.5
	MAX.CONT.PAR	16		01.0	0.21		56.82	n ,	1.58	0.75	1.09		
	TAKE-OFF	, ,	1.0	10.0	0.10		20.25	n	0.61	0.15	0.31		
	MAX . REDI INF	0 3	U.14	0.31	90.0	-	20.121	S	0.45	60.0			90
	10170000	7	20.0	0.02	30-0		79.171	9	0.41	0.00	17.0		61.
13					2	2	63.01	7	0.21		41.0		100
	100	2	116.02						17.0	00.0	0.11		62.
	TALERIED. 1	S	82.10	100		+	6.02	4					
	APPROACH	4		79.71		.58	5.88	0	0. 11	39.4	41.1		(
	CRUISE	ם ר	02.02	. 6	9.0	23	13 46	Ω	37.7	33.6	3.5.		0.55
	MAK CONT D.D	ο.	29.67	3.64	3	2	00.00	2	18.2	13.6			0
	14.6.00	0	2.70	2.07			51.62	5	8.6		7.0		1:
	7 0	S	2.46	1.81	0 10	707.0	11.56	าก	9			7	1.
	JAT TO LINE	J	2.12	1 20		17	11.81	ı va		1.0	5.8	`	-
			1	7.1		17	9.07	,	4.0	2.6	5.9	-	
NO.	1016							,	1.0	5.4	6.3	0.65	
	INTERMED. 1	1 0	22.2	1.99	2.08	60.	6 2 7					2	•
		7 4	28.7	2.37	2.64	11	777	S	0.85	0.76	0		
	(21.15	0	6.38	5.24	5.70		***	S	1.38	70	0 1	520.0	
	2 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2	3+48	7.16	7.60	0 0 0	1.51	S	5.86	7.7	13.1	0.122	10.09
			11.34	9.17	20.00	5	6.27	S.	12.55	2 .	2.5	0.417	1.9
	ANE-OFF		11.00		50.01	.50	5.73		00.0		7.5	1.159	10.3
	MAX. PEDLINE	7	12 66	5	11.00	63	5.81	ο .	71.67	5.5	6.6	1.509	
			20.5	•	11.86	58	20.4	0	25.74	8.5	1.1	1.612	0 .
	101.5	u						J	40.61	36.96	-		2.0
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	A P P P C A C H	ο.	0.18	0.11	0.14	000	96.00	S	0.05	0.0			
	Ruise	ā,	4+33	3.21	-	2		5	0.09	90.0		100.0	10.6
	20101	S	6 . 75	5.78		0 .	0	5	9	0 0		0.017	26.1
	250	S	9.35	2	2 :	1	6.74		10		•	0.392	11.2
	ARE-OFF	20	200	0 0	2	2	6.37		000		8.9	0.937	10.5
	MAX.REGLINE	,			0	56	6.31		,		1.8	1.320	
			20.00	9.31	00	5 3	5 4 4		-	4	5.5	1 266	
	3701								33.99	30.86	12.33	0000	5.30
	INTERMEG		2.11	1.88	ao		1					1.500	4.0
	APPROACH.	in .	2.63	2.24	2.53	180.0	27.5	5	0.80	0.74			
	TO TO THE TOTAL OF		2.05	1.7.			6.12	5	1.20		0.11	0.024	3.14
	trollst.		1.75	2 2			6.28	0		0.00	1.14	0.113	00.0
	AAA.CONI.P.R		1.90	2			8.88		90.1	79.1	1.77	860.0	6. 6.3
	ANE -OFF		2.20				7.35	1 .4	20.7	1.90	2.35	0.294	10.61
	MAX. PEDLINE		2.16		16.		9.24	3 4	211	£ 4.2	4.81	0.776	
			04.2	* 3 *	00		7.00	n	6.38	5.01	5.58	1.44.	
	IDLE	O						1	7.25	6.16	6.52	0.541	0.18
													0.5

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INTERMED. I APPROACH CRUISE MAX.CONT.P.R TAKE.OFF MAX.REDLINE

89

SCUTT ENVIRONMENTAL TECHNOLOGY INC. USAF TURBINE ENSINE EMISSIONS INVENTORY ENSINE MODEL SUMMARY REPORT

ENGINE MODEL : 16 54-100

SET 1492-014-0177

USAF CONTRACT F29601-75-C-0046

ENGINE 20, PAGE 2

**** CATEGORY 8 TESTS ONLY **** TEST LOCATION : G.E. LYAN

MEASUMED FUEL FLOW & SMORE NUMBER :

	0	3×	MEAS. FUEL	FLOW -	#/HR	*			SMOKE	NUMBER	-	*
TEST MODE	NO.	MAX	NIN	MEAN	STAD	* COEF	.0N	A A X	Z	MEAN	STAD	* COEF
	1		יו אר מני	1		Y 4	088	VALUE	VALUE		DEV	< * >
IDLE	5	395	375	345		70 1	!	1 1	1 1		1	1 1 1 1 1
INTERMED. 1	5	064	437	453		2 2 7 7	Λ	5.75	2.75	3.63	1.298	35.81
APPROACH	5	936	902	922			0	88.7	1.63	2.30	964.0	21.60
CRUISE	S	1531	1288	1472		7.04	n .	2.63	0 • 1 3	1.20	246.0	78.24
MAX.CONT.PER	5	5649	2472	25.76		2000	ο.	1.25	00.0	39.0	0.513	15.95
TAKE -OFF	5	2900	2764	28.46		2000	s .	9.25	3.36	6.13	5.559	41.76
MAX.REDLINE	.7	3347	21.70	2000		70.2	2	16.63	7.50	10.45	3.775	36.16
				2026		6.35	7	24.50	14.86	18.69	4.467	25 00

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AFAPL/TBC	2
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AEDC/DYR	1
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San Antonio ALC/MA	1
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